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PUBLIC HEALTH DEPARTMENT,  
JOHNSTON TERRACE,  
EDINBURGH, *June, 1935.*

MY LORD PROVOST, LADIES AND GENTLEMEN,

I have the honour to submit the Annual Report on the Health of the City for the year 1934.

The estimated population for the City is 457,099—males 207,036 and females 250,063. This is an increase of 4,326 over the previous year. As far as statistics give an indication of the health of a community, that of the City has never stood in a more favourable light. The general death-rate is the lowest that has ever been in this City; the number of deaths from pulmonary tuberculosis also constitutes a low record; the infantile mortality rate is the lowest that we have ever attained, and the birth-rate has increased slightly.

**Births.**—There were born in the City 7,188 children—males 3,722 and females 3,466. This gives a birth rate of 15·7. This is the first occasion since 1926 on which the birth-rate has shown an increase over the previous year, but our birth-rate is the lowest amongst the eight large centres of population in Scotland. Of the total births, 6·4 per cent. were illegitimate. Liberton Ward had the highest birth-rate, viz., 35·4 per 1,000 of the population, and the lowest was Morningside with 6·9.

**Deaths.**—The total number of deaths was 5,873, of which 2,799 were males and 3,074 females, giving a death-rate of 12·8. The highest rate, 15·2, is to be found in Liberton, and Corstorphine and Cramond Wards; the lowest, 10·8, in Gorgie. This is the fifth successive year that Gorgie has returned the lowest death-rate.

**Infantile Mortality.**—The rate this year is the lowest on record—62 deaths per 1,000 live births. This is a phenomenally low rate when the figures of 40 or 50 years ago are considered, and is attributable not only to the various official activities of the Local Authority, but to the general advance in hygiene and the knowledge and practice of infant culture. The infant mortality was highest in Central Leith with 112, and in George Square with 108—two wards with some unsatisfactory housing features—while Merchiston Ward was the lowest with 25.

**Housing.**—Good progress continues to be made with the closure and demolition of insanitary houses throughout the City. The improvement in the health and general well-being of the transferred tenants is revealed by the vital statistics of St. Leonard's (First Section) Improvement Scheme in 1927 and those of the Prestonfield Re-housing



Area in 1934. The tenants in the St. Leonard's (First Section) Improvement Scheme were transferred *en bloc* to Prestonfield, so that it is possible to make a comparison between the old conditions and the new.

The death-rate from all causes per 1,000 in 1927 in the area of the Improvement Scheme was 21·9, while in Prestonfield Area in 1934 it was 7·7, and for the whole city in 1934 it was 12·8. The death-rate from pulmonary tuberculosis in the old area was 1·5, in the new area 0·3 and for the whole City 0·7; the epidemic diseases death-rate in the old area was 3·4, in the new area 0·3 and in the whole City 0·3. The greatest improvement, however, is observed in the infantile mortality rate, 132 per 1,000 births in the old area, 28 in the new area and 62 for the whole City.

**Response to Environment.**—These results are very encouraging and should prove an incentive to the Local Authority to spare no effort in the providing of better housing for the working classes. As regards the attitude of the tenants of the re-housing areas, it is found that, although a number have complained at first about the distance from the centre of the City, the majority have settled down wonderfully well and frequently remark upon the difference in health and comfort to themselves and their families as the result of living in such well-equipped houses in the midst of spacious and pleasant surroundings. One pleasing feature is the response that has been made by the vast majority of the tenants in keeping their houses clean and tidy and in cultivating their gardens.

Illustrations of the types of working class houses now being erected in the City are given in the Report.

Two further Clearance Areas—the Ann Terrace and Trafalgar Lane Clearance Areas—were promoted during the past year and these were confirmed by the Department of Health practically without modification. The Areas contained 219 houses and affected a population of 872 persons. Many of the families have been already re-housed at Craigentenny and Granton. Two other Areas are well under way, namely, the Wilson's Park, etc., Portobello, Clearance Area and the New Broughton, etc., Clearance Area. In addition to these Clearance Areas, 399 individual houses were closed or demolished during 1934.

**Overcrowding.**—The problem of overcrowding is still acute. The new cases of overcrowding notified during the year almost equal in number those which were dealt with by providing families with larger and better houses. Overcrowding is recognised as being quite as dangerous to the health of the community as the continued residence in insanitary dwellings, and any attempt to improve conditions will be well worth the effort. The new Housing Bill at present before Parliament may offer a solution to this problem.

**Tuberculosis.**—Progress in this Department continues steadily. The actual pulmonary tuberculosis death-rate for the year is 0·66 per 1,000, which makes a low record for the City. This, however, still means that 302 Edinburgh citizens died of pulmonary tuberculosis during the year. Considering the character of this disease a long view must always be taken regarding its behaviour in the community. Progress

is best noted by a comparison with the activities of the disease in former years. In the last 34 years the death rate has been reduced by more than half. In 1900, 18 persons per 10,000 died, and in 1934 there were 7 per 10,000. It seems to me that the City has by its magnificent housing effort made no small contribution to the total abolition of the disease. Good housing, good hygiene, and good feeding form the foundation of the various steps tending towards the abolition of tuberculosis.

**Infectious Diseases.**—The past year was a busy one in regard to infectious diseases. No fewer than 4,530 patients were admitted to the City Hospital wards. There was nothing noteworthy in the type of cases admitted. The complete freedom of the nursing staff from diphtheria and scarlet fever is an emphatic comment on the value of routine active immunisation in a selected community.

In this connection I would plead for a more widespread response to our campaign for immunisation against diphtheria. The procedure is safe and simple, and its value in preventing the illness and anxiety associated with an outbreak of diphtheria has been proved beyond question. An arrangement has been made whereby all the medical practitioners in the City are empowered to give the protection free of charge to all who apply. Provision for the treatment is also made in schools and at child welfare centres, and parents are urged to see that their children are protected against attack from this dangerous disease.

**Bacteriological Services.**—The arrangement whereby the Professor of Bacteriology acts as the Director of our Bacteriological Services continues to function with smoothness and is a source of considerable strength to the Public Health Department. The bacteriological report is concerned mainly with highly scientific work which may not appeal to the ordinary layman. It is of some interest, however, to note that as far as we are aware only two cases of undulant fever were discovered in the City of Edinburgh last year, and in view of the fact that the milk is contaminated by the *Bacillus Abortus* to a considerable extent, it is not a little striking that so few cases of undulant fever have been reported. There is obviously a task of some magnitude before the Veterinarians, in addition to clearing herds of tuberculosis, to eliminate contagious abortion from the cattle.

**Maternity and Child Welfare.**—The aim of this Department is the spread of the knowledge of child culture and the prevention of disease, and the success of this is reflected in the low infantile death-rate already alluded to. As well as being seen in the low death rate, it is also shown in the improved health of the child population. Looking at the future citizen, and speaking broadly, I have no hesitation in saying that at no time were the children of the city better cared for or in better condition than at present. This does not mean that we have reached our ultimate goal. Much remains yet to be done before it can be assured that every child born will reach adult life in perfect physical condition.

I direct attention to the Mothercraft Classes. Some 300 mothers have attended these, but it should be compulsory, whether by law or fashion, for every prospective mother to have undergone a course of training in this subject long before the first baby arrives.

I am somewhat perturbed at the occurrence of 119 cases of puerperal fever and at the number of maternal deaths. The question which arises in one's mind is "How many ought not to have died?" These deaths are a challenge to the medical profession and a call to greater care than ever in maternity work.

**Venereal Diseases.**—The fact that 4,242 new patients reported for examination at our V.D. Centres speaks for the popularity of these clinics. It is gratifying to note that, although there has been a slight increase in the notified cases of ophthalmia neonatorum, no Edinburgh child lost its vision through this cause. Unfortunately in one case sent to our hospitals from outwith the City there was loss of vision, but this case only emphasises the necessity for dealing promptly with every case of suspected ophthalmia neonatorum. It is better to risk a wrong diagnosis and send a child to hospital for treatment, even though that child prove not to be suffering from specific infection of the eye, rather than to wait until the diagnosis is certain and then transfer the case to hospital possibly after permanent damage has resulted. In no case where the child was hospitalised at once, was there any loss of vision.

**Municipal General Hospitals.**—In regard to the three general hospitals no fewer than 5,918 patients were treated during the year.

In the Western Hospital there has been a marked increase in the volume of work—2,673 patients treated as against 1,689 in 1932. The quality of the work is of a high order and only our limited space prevents an increase in the numbers treated. The resources of the hospital are not so fully known to the citizens as they ought to be.

At the same time, many grateful acknowledgments are made of the treatment received in hospital. The difficulties regarding payments are gradually being overcome. In the majority of cases patients are only too glad to pay the small fee fixed by the Town Council, and where there is inability to pay, a fair and sympathetic view of the case is taken, the rule being to ensure that no patient is neglected through lack of means.

The co-operation with the staff of the University continues to be of great mutual advantage to the University and the Local Authority. I look forward to still greater activities in this direction. The new departure of having resident students in the Western Hospital, each for a term of three months, has been of great value, and only the limitations of the hospital prevent an increase in the numbers.

In speaking of the Northern and Eastern Hospitals where the more chronic types of illnesses are cared for, I desire to record my considered judgment that the care, attention and kindness bestowed on this class of patient by the members of the nursing staff would be difficult to excel. A comparison of the condition of some of the patients when outside the hospital and of their present condition leads to a conclusion favourable to the hospital in every case.

**Mental Services.**—The Mental Health and Allied Services in the City include the Mental Hospital at Bangour, Gogarburn Certified Institution, the psychological examination of backward school children, and the school for ineducable mental defectives.



Part of this work falls to the lot of the Public Health Committee, but by reason of historical development part is discharged by the Public Assistance Committee.

There is a slight diminution in the number of admissions to Bangour Mental Hospital and it is noteworthy that one-third of these were voluntary. This is an index of how far a mental hospital is removed from the too common popular conception of such institutions. It is in every sense a hospital where the greatest care and kindness are shown to the unfortunate patients.

Attention is drawn to the number of old persons admitted who suffer from mental decay, just as they show evidence of decay in their physical frames. This type of patient is found not only in the mental hospital but also in fairly large numbers in some of our general hospitals. Several reasons can be adduced for this, but one is that greater care and attention can be given them in an institution than in their own homes, and I am of opinion that in by far the majority of cases their happiness is not diminished by their being in hospital.

In regard to Gogarburn Certified Institution, the growth in numbers has been steady until now we have in residence some 358 patients. It is worthy of note that in 60 per cent. of the admissions part at least of the cause of mental deficiency was attributed to faulty inheritance and that in the remaining 40 per cent. the cause was directly attributed to diseases or injury during infancy or childhood. Those patients emphasise the necessity for further investigation into the causes and prevention of mental deficiency. One must still regret that patients cannot be admitted to this institution without certification.

**School Medical Service.**—The alteration in the method of medical inspection which was introduced some two years ago has been continued for another year, and I think with the best results. I had hoped to secure the help of an additional School Medical Officer during the year, but this hope was not fulfilled. Had an additional Medical Officer been granted I should have been able to have every child seen by a medical man once a year in all our elementary schools—an ideal which I think is worthy of attempting to attain.

**Nutrition of Children.**—As I have pointed out in previous reports the children now leaving school are physically and medically fitter than they have ever been. There is not, however, quite so much improvement in those entering school for the first time. This is shown by comparing the average weights of infant entrants in the following years :—

	<i>Boys.</i>	<i>Girls.</i>
1907-1908 . . .	40·7 lbs.	39·4 lbs.
1933-1934 . . .	41·1	39·2

Weight, however, cannot be taken as the sole indication of general nutrition, nor of dietary defect. One might quote dental decay in infant entrants ; in 1907-8 each entrant had 6·3 teeth decayed ; in 1933-34, 4·2 ; a slight improvement when taken over almost 6,000 children.

Further evidence is given by the numbers with rickets :—In 1907-8 they were (per cent.) boys, 2·6 ; girls, 1·4 ; last year the corresponding figures were :—boys, 1·2 ; girls, 0·6.

Inflammation of the eyes is a common accompaniment of under-nourishment in young children and the percentages for the same years were 9·8 and 0·75—a material improvement.

Generally, however, the conclusion is justified that while much is done to improve the physique and health of the child in school, there is still too little done during the “toddling” years.

A point of no small interest is the diminution of deformities in children entering school for the first time. In 1907-8, 5·8 per cent. boys and 1·8 per cent. girls had acquired deformities. Last year the corresponding figures were 0·5 and 0·4 per cent. respectively. This indicates, firstly, a diminution of such diseases as infantile paralysis, rickets and tuberculosis, and, secondly, earlier and more expert treatment.

Congenital deformities in infant entrants have also lessened though not to the same extent. In 1907-8, 1·7 per cent. boys and 0·7 per cent. girls were so disabled, while in 1933-34 the figures were 0·1 and 0·3, an improvement possibly largely due to antenatal care. Particularly interesting is it to note the marked diminution of deformities in boys.

**Factory and Workshop Acts.**—The standard of hygiene in the various factories and workshops has been well maintained, but there are still desirable improvements. The co-operation with the factory owners is satisfactory. The chief faults which have been noted are absence of cleanliness and deficient sanitary accommodation, but much of this can be overcome by attention on the part of the occupiers or managers.

**Acknowledgments.**—I have to thank all the officials of the Department, in whatever grade they may be, for their very hearty loyal co-operation, and also the Chairman and the various members of the Public Health Committee for wise and considered counsel.

Looking at the various sub-departments and their activities with a somewhat critical eye, as head of the Public Health Service I have no hesitation whatever in saying that the work is carried out with a degree of efficiency which is praiseworthy. We are not a trading Department and our returns can only be shown in the increased health and vigour of the community.

I am, My Lord Provost, Ladies and Gentlemen,

Your Obedient Servant,

JOHN GUY,

M.D., D.P.H. (Camb.), F.R.F.P. & S. (Glas.), F.R.C.P. (Edin.),

*Medical Officer of Health.*

# SUMMARY OF STATISTICS

For the Years 1930, 1931, 1932, 1933 and 1934.

	1930	1931	1932	1933	1934
Population Estimated to middle of year . .	437,098	443,042	447,800	452,773	457,099
Area of City—Acres . .	32,526	32,526	32,526	32,526	32,526
Density of Population—					
Persons per acre . .	13·4	13·6	13·8	13·9	14·1
Houses Inhabited . .	108,375	109,421	111,241	113,497	116,419
Marriages Registered . .	3,693	3,788	3,932	4,037	4,245
Birth-rate (Corrected for Country Births) . .	16·7	16·2	15·5	15·1	15·7
Death-rate (Corrected for Country Deaths) . .	13·8	12·9	13·5	13·2	12·8
Infantile Mortality . .	82	69	73	66	62
Cancer Death-rate . .	1·6	1·5	1·9	1·7	1·7
Pulmonary Tuberculosis Death-rate . .	·8	·7	·7	·7	·7
Epidemic Diseases Death-rate	·7	·2	·5	·3	·3

\* Includes Enteric Fever, Measles, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhœa and Enteritis under 2 years.

Note.—Further detailed statistics are shown in the Tables throughout this Report.





## VITAL STATISTICS

AND

### REPORTS RELATING TO VARIOUS SUB-DEPARTMENTS AND INSTITUTIONS.

#### POPULATION.

The population of the City of Edinburgh for 1934 as estimated by the Registrar-General for Scotland was 457,099. This figure represents an increase of 4,326 persons over the estimate for the previous year.

As in former years, the calculation is based on the number of occupied houses in the City at Whitsunday, while certain adjustments are made for the movement of population due to emigration and other factors.

The following table shows the distribution of the population throughout the extended city, and includes residents in institutions and military quarters situated in the respective areas.

Area.	Males.	Females.	Total	Acres.	Persons Per Acre.
Edinburgh . . . . .	149,421	186,343	335,764	10,877	30·9
Leith . . . . .	41,457	44,883	86,340	1,641	52·6
Suburban . . . . .	16,158	18,837	34,995	20,008	1·7
	207,036	250,063	457,099	32,526	14·1

**Density.**—The City extends to 32,526 acres and the density of population was 14·1 persons per acre. A table on page 5 shows the population and density in each of the twenty-three City wards. Persons resident in institutions and military quarters are, it will be noted in this table, excluded from the ward populations and shown under separate headings. This procedure permits of greater accuracy in compiling the vital statistics relative to the respective wards.

#### HOUSING.

**Inhabited Houses.**—The Burgh Assessor has supplied me with the number and rentals of occupied dwelling houses on the Valuation Roll at Whitsunday, 1934. There is an increase of 2,922 when compared with the corresponding period in the previous year.

## NUMBER OF DWELLING-HOUSES OCCUPIED AT WHITSUNDAY 1934.

Ward.	Under £5.	£5 and under £10.	£10 and under £15.	£15 and under £20.	£20 and under £30.	£30 and under £40.	£40 and under £50.	£50 and up- wards.	Total in each Ward.
1. Calton . . . . .	7	279	1,356	1,477	1,543	497	111	190	5,460
2. Canongate . . . . .	61	784	1,558	1,048	1,191	299	79	109	5,129
3. Newington . . . . .	3	124	666	562	1,253	774	494	1,725	5,601
4. Morningside . . . . .	1	15	34	155	1,035	2,163	1,479	1,940	6,822
5. Merchiston . . . . .	...	12	247	528	2,170	1,510	452	966	5,905
6. Gorgie . . . . .	12	69	1,602	2,155	3,318	379	61	96	7,692
7. Haymarket . . . . .	4	159	427	460	1,199	699	281	1,531	4,760
8. St. Bernard's . . . . .	16	285	482	436	1,627	1,466	220	968	5,500
9. Broughton . . . . .	4	147	572	993	1,377	791	246	237	4,367
10. St. Stephen's . . . . .	12	457	750	847	993	549	298	653	4,559
11. St. Andrew's . . . . .	20	818	708	375	279	98	59	465	2,822
12. St. Giles . . . . .	33	1,138	1,532	636	728	128	60	153	4,498
13. Dalry . . . . .	1	203	1,979	1,945	985	35	6	61	5,215
14. George Square . . . . .	19	521	1,005	844	1,225	494	229	348	4,685
15. St. Leonard's . . . . .	30	961	1,783	827	612	227	106	124	4,670
16. Portobello . . . . .	6	170	477	1,019	3,135	1,931	749	520	8,037
17. South Leith . . . . .	4	271	1,438	2,183	2,536	355	150	183	7,120
18. North Leith . . . . .	9	791	1,732	982	512	100	28	85	4,239
19. West Leith . . . . .	11	588	1,053	620	729	797	414	740	4,952
20. Central Leith . . . . .	1	258	1,595	656	491	109	15	56	3,181
21. Liberton . . . . .	36	318	1,354	680	307	290	238	556	3,779
22. Colinton . . . . .	12	169	307	180	182	509	290	805	2,454
23. Corstorphine and Cramond	17	139	226	246	752	2,046	700	966	5,092
Total . . . . .	319	8,676	22,883	19,854	28,179	16,246	6,765	13,497	116,419
Edinburgh Area . . . . .	229	6,142	15,178	14,307	22,670	12,040	4,930	10,106	85,602
Leith Area . . . . .	25	1,908	5,818	4,441	4,268	1,361	607	1,064	19,492
Suburban Area . . . . .	65	626	1,887	1,106	1,241	2,845	1,228	2,327	11,325

**Housing Schemes.**—According to information submitted by the City Chamberlain, the Corporation has erected 11,464 houses up to the period ending 31st December 1934. Of that number, 8,107 or 71 per cent. were of three apartments, the type of house most in demand by the working classes.

	Number of Apartments.												Totals.	
	One.		Two.		Three.		Four.		Five.					
	Number.	Rate per Cent.	Number.	Rate per Cent.	Number	Rate per Cent.	Number.	Rate per Cent	Number.	Rate per Cent.	Number.	Rate per Cent.		
Improvement and Reconstruction Schemes—														
Non-State-Aided . . . . .	268	44	338	56	2	...	...	...	...	...	608	5.5		
State-Aided . . . . .	28	1	788	29	1,937	68	81	2	...	...	2,834	24.7		
Provision of New Houses—														
Non-State-Aided . . . . .	73	47	76	48	7	4	1	1	...	...	157	1.4		
State-Aided : 1919 Act . . . . .	...	...	179	12	903	62	241	17	127	9	1,450	12.6		
1923 .. . . .	...	...	18	100	...	...	...	...	...	...	18	.2		
1924 .. . . .	...	...	880	14	5,258	82	259	4	...	...	6,397	55.8		
Totals . . . . .	369	3	2,279	20	8,107	71	582	5	127	1	11,464	100.0		



SAUGHTON CRESCENT.



WHITSON GROVE, SAUGHTON.

EDINBURGH—NEW HOUSING AREAS.





Since 1st January, 1919, to 28th December, 1934, plans have been passed by the Dean of Guild Court for the erection of 28,132 houses.

## VITAL STATISTICS.

In the accompanying table a decennial survey of the increase which has taken place in the population of the City from 1861 to 1921, and a yearly survey from the latter date onwards, are given. The births and deaths with the rates per 1000 of the population are also shown, together with the infantile mortality rates per 1000 live births.

Year.	Population.	Deaths.	Rate per 1000.	Births.	Rate per 1000.	Infantile Mortality.
1861	170,444	3,946	23·1	5,694	33·4	135
1871	196,979	5,484	27·8	6,874	34·8	151
1881	228,346	4,308	18·8	7,360	32·2	128
1891	261,225	5,257	20·1	7,382	28·2	138
1901	316,921	5,633	17·7	7,920	24·9	143
1911	320,829	4,652	14·4	6,507	20·8	115
* 1921	420,264	6,048	14·4	9,028	21·5	96
1922	422,112	6,447	15·3	8,772	20·8	91
1923	423,956	5,875	13·9	8,662	20·4	82
1924	425,802	6,312	14·8	8,404	19·7	89
1925	427,664	6,138	14·4	7,843	18·3	96
1926	429,535	5,710	13·3	7,926	18·5	80
1927	431,413	6,066	14·1	7,621	17·7	80
1928	433,299	5,872	13·6	7,420	17·1	75
1929	435,195	6,442	14·8	7,304	16·8	80
1930	437,098	6,038	13·8	7,307	16·7	82
1931	443,042	5,726	12·9	7,164	16·2	69
1932	447,800	6,032	13·5	6,960	15·5	73
1933	452,773	5,964	13·2	6,835	15·1	66
1934	457,099	5,873	12·8	7,188	15·7	62

\* City boundaries extended.

## MARRIAGES.

There was an increase in the number of marriages registered during the year as compared with 1933, the figures being 4,245 as against 4,037. The marriage rate was equivalent to 9·3 per 1000 of the population, and excepting Aberdeen, where the rate was 9·8, it was highest among the large centres of population in Scotland.

It should be noted that 1,104 or 26 per cent. of the marriages in Edinburgh were contracted by declaration before the Sheriff. In many of these "irregular" marriages the contracting parties came from outlying districts.

The number of marriages registered in each quarter of the year was as follows :—

1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
819	987	1,390	1,049	4,245

## BIRTHS.

Births registered during the year totalled 7,913. After adjustments had been made for outward and inward transfers the corrected number allocated to the City was 7,188—3,722 males and 3,466 females. The birth-rate was equivalent to 15·7 per 1000 of the estimated population, and is slightly in excess of the rate for the previous year, which was 15·1.

A steady decline in the annual birth-rate has been recorded over a series of years, and this is the first occasion since 1926 on which the rate has shown an upward tendency. Several factors may be assumed to have contributed to the increase, among them being the speeding up in house building and the brighter outlook regarding employment for those of marriageable age. In Liberton ward, which embraces the new Niddrie Mains Housing Area, the birth-rate was 35·4 per 1000.

The number of births and the birth-rates in the various municipal wards will be found in the table on page 5.

The following statement gives details regarding the corrected births registered in each quarter of the year :—

Quarter.	Total Births.	Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
1st . . .	1,868	1,730	138	7·4
2nd . . .	1,862	1,743	119	6·4
3rd . . .	1,717	1,610	107	6·2
4th . . .	1,741	1,648	93	5·3
Totals .	7,188	6,731	457	6·4

## DEATHS AND DEATH RATES.

Deaths from all causes numbered 5,873—2,799 males and 3,074 females. The death-rate was 12·8 per 1000, which is the lowest ever recorded for the City.

Of the total deaths, 449 were of infants under one year, representing a record low infantile mortality rate for the City of 62 per 1000 live births. In 1933 the rate was 66.

The following table shows the allocation of the deaths in each quarter of the year, together with the equivalent death-rates :—

Quarter.	Number of Deaths.	Death-rates per 1,000.
1st . . .	1,662	14·7
2nd . . .	1,476	12·9
3rd . . .	1,259	10·9
4th . . .	1,476	12·9
Total .	5,873	12·8

On page 5 the distribution of the deaths throughout the wards in the City, together with the death-rates applicable to each is shown.

Table showing the Population, etc., also the Births and Deaths in each Ward during 1934.

WARD.	Population.	Area in Acres.	Density of Population per Acre.	BIRTHS.		INFANTILE MORTALITY.		DEATHS.		
				Number.	Rate per 1000.	Deaths.	Rate per 1000 Births.	*EPIDEMIC DISEASES.		ALL CAUSES.
								Number.	Rate per 1000.	
Calton	22,412	228	98.3	333	14.9	21	63	7	.3	11.6
Canongate	21,999	965	22.8	381	17.3	20	52	8	.4	11.9
Newington	21,732	891	24.4	237	10.9	10	42	3	.1	12.4
Morningside	22,084	1,358	16.3	153	6.9	7	46	..	..	14.3
Merchiston	20,652	677	30.5	198	9.6	5	25	2	.1	12.7
Gorgie	26,565	604	39.3	604	22.7	32	53	9	.3	10.8
Haymarket	17,953	959	18.7	164	9.1	9	55	3	.2	13.0
St. Bernard's	18,155	1,250	14.5	321	17.7	15	47	6	.3	12.7
Broughton	15,699	472	33.3	249	15.9	16	64	4	.3	12.9
St. Stephen's	17,790	190	93.6	220	12.4	12	55	4	.2	14.3
St. Andrew's	11,421	206	55.4	158	13.8	10	63	6	.5	11.9
St. Giles	20,990	266	78.9	344	16.4	23	67	6	.3	14.0
Dairy	21,584	187	115.4	346	16.0	17	49	6	.3	11.9
George Square	21,439	248	86.4	279	13.0	30	108	12	.6	12.8
St. Leonard's	20,911	104	201.1	338	16.2	27	80	4	.2	11.9
Portobello	26,822	2,200	12.2	574	21.4	36	63	10	.4	12.7
South Leith	30,099	819	36.8	457	15.2	25	55	11	.4	11.2
North Leith	20,608	218	94.5	412	20.0	25	61	16	.8	12.9
West Leith	19,544	462	42.3	277	14.1	21	76	13	.7	14.1
Central Leith	14,483	142	102.0	249	17.2	28	112	7	.5	12.5
Liberton	11,059	6,339	1.7	392	35.4	22	56	8	.7	168
Colinton	7,171	5,602	1.3	94	13.1	6	64	5	.7	15.2
Corstorphine and Craigmond	12,692	8,067	1.6	235	18.5	13	55	5	.1	13.8
Institutions	11,289	..	..	144	..	18	..	5	..	193
Military Quarters	1,946	..	..	29	..	1	..	..	..	213
Totals	457,099	32,526	14.1	7,188	15.7	449	62	156	.3	5,873
										12.8

\* Includes Enteric Fever, Measles, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhoea and Enteritis under 2 years.

NOTE.—The Ward populations have been adjusted by deducting the population resident in the principal institutions and military quarters. Births and deaths occurring in institutions are allocated to Wards, except in cases where a permanent domicile cannot be established.

The accompanying details extracted from the Registrar-General's preliminary statement for 1934 allow a comparison to be made of the death rate in Edinburgh, with those of other large centres of population in Scotland.

	Rate per 1000 of Population.		Rate per 1000 of Population.
Glasgow . . . . .	13·7	Paisley . . . . .	12·6
Edinburgh . . . . .	12·8	Greenock . . . . .	12·9
Dundee . . . . .	13·6	Motherwell and Wishaw . . . . .	11·8
Aberdeen . . . . .	12·6	Clydebank . . . . .	11·9
SCOTLAND . . . . .	12·9		

**Ward Mortality.**—Two suburban wards, Liberton, and Corstorphine and Cramond, returned the highest general death-rate in the City. In each case the rate was 15·2 per 1000 of the ward populations.

An analysis of the Liberton ward returns revealed the fact that of the total deaths, 35 per cent. referred to persons over the age of 65 years, and 13 per cent. to infants under one year. There were 23 cases of pulmonary tuberculosis notified and 13 deaths, representing a tuberculosis death-rate of 1·2 per 1000. On the other hand the ward birth-rate of 35·4 was by far the highest in the City, while the deaths of infants under one year represented an infantile mortality rate of 56 per 1000 births. There was no localised outbreak of any particular disease during the year.

In the Corstorphine and Cramond ward, which is a large residential area consisting of 8,067 acres with a density of only 1·6 persons per acre, the houses are mostly of recent construction, and are principally of the bungalow and villa type. There were 193 deaths, and of that number, 58 per cent. were of persons over 65 years of age. The infantile mortality (55) and the tuberculosis death-rate (·6) compare favourably with the figures for the City as a whole.

Morningside ward, where the death-rate was 14·3 per 1000, usually returns a comparatively high death-rate, the chief reason being that many elderly and retired people reside in the district, and a large percentage of the deaths relate to persons in advanced years. The tuberculosis death-rate was ·5 per 1000 and the infantile mortality 46.

In the old town wards of St. Stephen's and St. Giles, general death-rates of 14·3 and 14·0 respectively were reported, whilst in George Square, another ward with some unsatisfactory housing features, the high infantile mortality rate of 108 deaths per 1000 births was recorded. For many years these wards have occupied an unenviable position so far as vital statistics are concerned, but the tendency to improve has been maintained.

For the fifth successive year, Gorgie ward returned the lowest general death-rate for the extended City. A large population has, within recent years, taken up residence in the new housing areas at Stenhouse and Saughton. There is a total population of 26,565 in the ward and during the year, 286 deaths occurred, representing a general death-rate of 10·8 per 1000. The birth-rate was 22·7 and the infantile mortality rate



53. Only 12 deaths from pulmonary tuberculosis were certified, and the death-rate from this cause was  $\cdot 5$  per 1000 of the population. These figures are encouraging, and from a health point of view, Gorgie ward has much to commend it.

North Leith (14.1) had the highest general death-rate amongst the four Leith wards. It is a congested ward with 94.5 persons to the acre. Many overcrowded and unhealthy areas still exist, but a further clearance scheme which is about to be undertaken, will bring about a much desired improvement. There were 30 cases of pulmonary tuberculosis intimated from this ward and 22 deaths, representing a tuberculosis death rate of 1.1 per 1000 as compared with  $\cdot 7$  for the whole City. The birth-rate was 20.0 and the infantile mortality rate was 61 per 1000 births.

The Central Ward of Leith, another very congested area, extending to 142 acres, with a density of 102 persons to the acre, returned the highest infantile mortality rate (112) for the City.

Except in the cases mentioned above, the statistics relating to the City as a whole, are below the average of recent years and compare favourably with those in other large towns. There can be no doubt that the steps taken by the local authority to clear out many overcrowded and derelict houses in the City are having a beneficial effect upon the health and well-being of the community.

A table showing the principal statistics in each of the twenty-three municipal wards will be found on page 5.

## CAUSES OF DEATH.

The table on page 10 shows the principal causes of death tabulated according to disease groups and age periods.

**Principal Epidemic Diseases.**—Enteric fever, measles, scarlet fever, whooping cough, diphtheria, and diarrhœa and enteritis in children under 2 years of age, are allocated to this group.

The total deaths during the year numbered 156, as compared with 140 in 1933. Measles 66, diphtheria 26, scarlet fever 16, whooping cough 5, and diarrhœa and enteritis 43, were the stated causes of death.

Further detailed information regarding the notification of the diseases enumerated in this group will be found under the heading "Infectious Diseases" on page 11, while the number of deaths and the death-rates per 1000 of the population in each municipal ward appear on page 14.

**Influenza.**—The City was comparatively free from influenza during the year. In only one case was this disease given as the sole cause of death. Influenza was, however, given as a contributory cause in 27 cases. The corresponding figures for 1933 were 20 and 166 respectively.

**Tuberculosis.**—Deaths from pulmonary tuberculosis numbered 302, and from non-pulmonary tuberculosis 80—a total of 382. The death-rate from all forms of the disease was equivalent to  $\cdot 8$  per 1000 of the estimated population. In the previous year there were 399 deaths and the rate was  $\cdot 9$  per 1000.

The Tuberculosis Officer in his report on page 19 deals more fully with the subject of tuberculosis and the work of his Department during the year.

**Cancer.**—Cancer took heavy toll of the community during the year, and no fewer than 798 or 14 per cent. of the total deaths registered in the City were due to malignant disease in one or other of its various forms. The males numbered 350 and the females 448, and the death-rate per 1000 of the population was equivalent to 1·7.

It will be seen from the table on next page that in a large percentage of the deaths, the disease was located in the digestive organs, viz. :—stomach and œsophagus 188, and intestines and rectum 164.

Malignant disease of the female genital organs was the cause of death in 78 instances, while the female breast was affected in 81 cases.

**Diseases of the Nervous System.**—There were 758 deaths certified as due to diseases of the nervous system, and of that number 442 or 58 per cent. referred to persons over the age of 65 years.

Cerebral hæmorrhage, apoplexy and hemiplegia were stated to be the cause of 440 deaths, epilepsy 20, meningitis other than tubercular or cerebro-spinal 10, while 8 deaths were caused by infantile convulsions.

**Diseases of the Circulatory System.**—Of the 1,323 deaths from circulatory diseases, affections of the heart were responsible for 1,187. Arterio sclerosis, gangrene and other diseases of the blood vessels were the certified causes of the other 136 deaths in this group. Of the total deaths, 62 per cent. were of persons over 65 years of age.

**Diseases of the Respiratory System.**—Deaths from respiratory diseases amounted to 683. Pneumonia (346) and bronchitis (257) were the principal causes.

Of the total respiratory deaths, 111 or 16 per cent. were of children under 5 years of age, the greater number of whom (83) died of pneumonia, while 48 per cent. were persons over 65 years of age.

**Diseases of the Digestive System.**—Digestive disorders accounted for 355 deaths throughout the year. Of this number, gastric and duodenal ulcers caused 78, diarrhœa 71, non-malignant diseases of the liver 61, and appendicitis 40.

Included in the number of deaths classified to diarrhœa and enteritis were 43 children under the age of 2 years.

**Diseases of the Genito-Urinary System.**—There were 304 deaths of which acute and chronic nephritis were responsible for 207, diseases of the prostate 42, and 55 to various other diseases of the genito-urinary system.

**Deaths by Violence.**—The deaths certified during the year as due to motor accidents, falls, and other forms of violence numbered 311. Of this number 83—56 males and 27 females—were of a suicidal nature.







## INFECTIOUS DISEASES.

The various diseases falling to be dealt with under this heading are as follows :—

(1) Diseases which are notified in terms of :—

(a) Section 6 of the Infectious Disease (Notification) Act, 1889.

(b) The Public Health (Infectious Diseases) Regulations (Scotland) 1932, dated 9th December, 1932, made by the Department of Health for Scotland under Section 4 (1) of the Infectious Disease (Notification) Act, 1889 (52 and 53 Vict. C.72) and Section 78 of the Public Health (Scotland) Act, 1897 (60 and 61 Vict. C.38).

(2) Measles and whooping cough (first case under 5 years of age, in each household), which have been made temporarily notifiable by the Local Authority.

The following table shows the number of notifications for each month of the year :

Disease.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Diphtheria and Membranous Croup . . . . .	62	62	50	43	30	42	57	32	33	43	38	54	546
Erysipelas . . . . .	43	47	55	22	29	29	22	18	18	30	40	35	388
Scarlet Fever . . . . .	511	312	285	167	144	122	99	103	138	186	166	186	2,419
Typhoid Fever . . . . .	...	1	...	...	...	1	1	2	3	2	1	2	13
Puerperal Fever . . . . .	11	12	14	10	9	14	11	6	3	7	15	7	119
Puerperal Pyrexia . . . . .	1	8	6	4	6	2	3	6	6	4	9	...	55
Cerebro-spinal Fever . . . . .	4	7	6	5	1	...	1	2	1	5	2	...	34
Infective Jaundice . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis, Pulmonary . . . . .	61	49	49	48	55	47	39	24	36	37	40	51	536
Tuberculosis, other forms . . . . .	23	22	23	27	25	32	18	18	15	19	18	18	258
Ophthalmia Neonatorum . . . . .	8	5	2	6	3	5	4	2	...	1	4	6	46
Malaria . . . . .	3	2	1	3	1	3	...	1	4	1	4	...	23
Dysentery . . . . .	...	10	6	4	1	2	1	3	...	2	7	10	46
Acute Primary Pneumonia . . . . .	60	43	49	34	34	30	29	7	20	19	30	68	423
Acute Influenzal Pneumonia . . . . .	4	4	4	7	2	1	...	1	...	...	...	4	27
Measles . . . . .	14	42	275	935	812	656	293	82	40	29	15	7	3,200
Whooping Cough . . . . .	5	3	7	17	18	16	13	19	8	12	16	55	189
Poliomyelitis . . . . .	...	...	...	1	...	...	...	...	...	...	1	...	2
Polio-encephalitis . . . . .	...	...	...	...	...	...	1	...	...	...	...	...	1
Encephalitis Lethargica . . . . .	1	1	...	...	...	...	...	...	...	1	...	...	3
Totals . . . . .	811	630	832	1,333	1,170	1,002	592	326	325	398	406	503	8,328

**Enteric Fever.**—Only 13 cases of enteric fever were reported to the Department during the year. Three of the patients contracted the disease in districts outwith the City, while two were assumed to have been infected abroad.

The remaining 8 cases were intimated at different times from various districts of the City.

No deaths occurred.

**Diphtheria.**—There were 546 notifications of diphtheria received during the year as compared with 606 in 1933. The disease which was of a mild nature was not confined to any particular locality, the cases being reported from all wards in the City.

Deaths numbered 26, representing 4·8 per cent. of the cases. The average for the past 10 years was 5·6 per cent.

**Scarlet Fever.**—The widespread epidemic of scarlet fever which attacked the City in 1933 continued well into the following year, and it was not until the month of May that notifications began to decline in number.

Of the 2,419 cases reported during 1934, 1,108 occurred during the first three months of the year.

Fortunately, the mortality was low, and only 16 deaths, representing 0·66 per cent. of the cases, took place.

Tuberculosis patients and others who were removed to the smallpox hospital and the Northern General Hospital during the epidemic in order to make room for the accommodation of scarlet fever patients, were transferred to their original quarters at Colinton Mains.

**Cerebro-Spinal Meningitis.**—Cases of cerebro-spinal meningitis intimated numbered 34, a decrease of 20 when compared with the previous year.

There were 22 deaths, 6 of which were children who had come from country districts to the Royal Hospital for Sick Children or other institution and died in the City Hospital where they had been removed for treatment.

Of the 16 City deaths, 9 children under the age of 5 years succumbed to the disease.

The death-rate was equivalent to 65 per cent. of the total cases.

**Erysipelas.**—There were 388 persons reported to be suffering from erysipelas, and of these, 27 died. Eight of the deaths referred to children under 5 years, and seven to persons over 65 years of age.

The percentage of deaths to cases was 7·0.

**Puerperal Fever and Pyrexia.**—Notifications of puerperal fever numbered 119 and puerperal pyrexia 55, as compared with 93 and 57 respectively, in the previous year.

Reference is made to notifications and deaths from these diseases in the report by the Child Welfare Medical Officer, which appears on page 53.

**Ophthalmia Neonatorum.**—Forty-six intimations of ophthalmia neonatorum were received during the period under review.

In the reports by the Child Welfare and Venereal Diseases Medical Officers on pages 53 and 69, detailed accounts are given concerning these cases.

**Measles and Whooping Cough.**—Measles was present in epidemic form during the year and no fewer than 3,200 notifications were received.

The increased incidence was first noted in the month of March, when 275 cases were reported. The following month there were 935 intimations, in May 812, June 656, and July 293. In August the number had fallen to 82, and the cases rapidly decreased until in December only 7 were notified.

Every district of the City was involved in the outbreak, Portobello (274), Gorgie (261), South Leith (212), and North Leith (202), being the wards most severely affected.

There were 66 deaths, 91 per cent. of which occurred among young children under the age of 5 years.

Severe cases with complications were removed to the City Hospital for treatment.

Whooping Cough was not unduly prevalent, only 189 "first" cases being reported to the Department. The deaths numbered 5, and were all of children under 5 years of age.

**Tuberculosis.**—Notifications and deaths from respiratory tuberculosis showed a decrease as compared with the previous year, and the death-rate from this disease was the lowest ever recorded for the City.

The non-pulmonary notifications received were 15 more than in 1933. The trend of this form of tuberculosis has, however, for the past 10 years or so been steadily downwards.

A more detailed account of the work of the Tuberculosis Department is given by the Tuberculosis Officer, on page 19.

**Other Diseases.**—Of the other infectious diseases tabulated on page 11, no special comment is necessary.

Notifications of and deaths from the Principal Epidemic Diseases throughout the year in the City are shown in the table on page 14, while on page 15 a statement is given regarding the type of house occupied by the infected persons.

Table showing the Infectious Disease Notifications and Deaths (except Phthisis) in each Ward during 1934.

No.	WARD	ENTERIC FEVER.		PUERPERAL FEVER.		DIPHTHERIA.		SCARLET FEVER.		ERYSIPELAS.		CEREBRO-SPINAL FEVER.		MEASLES.		WHOOPING COUGH.		PNEUMONIA (all Forms).	
		Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.
1	Calton	1	...	5	2	16	1	148	1	13	1	...	...	170	1	8	1	17	15
2	Canongate	...	...	6	1	26	2	98	...	17	...	...	...	145	2	2	1	27	23
3	Newington	2	...	3	...	10	...	87	...	5	...	...	...	112	1	5	...	17	13
4	Morningside	...	...	...	...	...	...	102	...	17	...	...	...	36	...	...	...	9	16
5	Merchiston	...	...	...	...	14	...	80	...	11	...	...	...	44	...	...	...	8	11
6	Gorgie	...	...	2	...	17	...	190	...	29	...	...	...	261	...	...	...	15	23
7	Haymarket	1	...	9	...	14	...	77	...	7	...	...	...	52	...	...	...	10	11
8	St. Bernard's	...	...	2	...	22	...	146	...	17	...	2	...	119	...	...	...	16	10
9	Broughton	1	...	3	...	20	...	71	...	12	...	...	...	87	...	...	...	16	5
10	St. Stephen's	...	...	4	...	17	...	89	...	13	...	...	...	102	...	...	...	10	17
11	St. Andrew's	...	...	...	...	13	...	36	...	8	...	...	...	92	...	...	...	11	7
12	St. Giles	1	...	5	...	19	...	75	...	1	...	...	...	130	...	...	...	31	15
13	Dalry	...	...	6	...	17	...	56	...	12	...	...	...	138	...	...	...	10	10
14	George Square	1	...	4	...	29	...	61	...	14	...	2	...	105	...	...	...	16	12
15	St. Leonard's	...	...	5	...	17	...	105	...	9	...	2	...	170	...	...	...	40	21
16	Portobello	1	...	5	...	41	...	223	...	25	...	2	...	274	...	...	...	28	25
17	South Leith	...	...	7	...	69	...	177	...	23	...	4	...	212	...	...	...	22	23
18	North Leith	1	...	5	...	48	...	100	...	19	...	2	...	202	...	...	...	22	20
19	West Leith	...	...	...	...	25	...	95	...	2	...	...	...	164	...	...	...	19	19
20	Central Leith	1	...	2	...	26	...	107	...	19	...	1	...	128	...	...	...	19	13
21	Liberton	...	...	6	...	23	...	97	...	20	...	...	...	132	...	...	...	21	9
22	Colinton	...	...	1	...	15	...	75	...	16	...	...	...	53	...	...	...	1	5
23	Corstorphine and Craigmiles	...	...	1	...	9	...	54	...	2	...	...	...	51	...	...	...	11	11
	Institutions	2	...	31	...	32	...	111	...	52	...	9	...	193	...	...	...	51	12
	Military Quarters	...	...	...	...	...	...	5	...	1	...	...	...	28	...	...	...	3	...
	Totals	13	...	119	*32	546	†27	2,419	†17	388	†28	34	£22	3,200	67	189	*6	450	346
	Case- and Death-rates (per 1000 population) for year 1933	·02	·00	·26	·07	1·19	·05	5·29	·03	·84	·06	·07	·04	7·00	·14	·41	·01	·98	·75
	Case- and Death-rates (per 1000 population) for year 1934	·11	·01	·21	·03	1·34	·05	9·97	·05	·80	·05	·09	·06	·39	·00	2·17	·14	1·62	·86

The Deaths in this Table represent those actually occurring among the cases notified although taking place after 31st December.

\* Includes 11 deaths transferred out

† Includes 1 death transferred out.

‡ Includes 1 death transferred out.

§ Includes 1 death transferred out.

\* Includes 6 deaths transferred out.

† Includes 1 death transferred out.



Table showing the Notifications of Infectious Diseases, classified according to size of house in which the infected persons resided.

DISEASE	1 Apartment.		2 Apartments.		3 Apartments.		4 Apartments.		5 Apartments.		Over 5 Apartments.		Institutions and Military Quarters.		Total Cases.
	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	
Diphtheria . . . . .	21	3.9	167	30.6	178	32.6	79	14.4	14	2.5	55	10.0	32	6.0	546
Erysipelas . . . . .	11	2.8	111	28.6	102	26.3	61	15.7	32	8.3	18	4.6	53	13.7	388
Scarlet Fever . . . . .	86	3.6	589	24.3	826	34.1	352	14.6	138	5.7	312	12.9	116	4.8	2,419
Typhoid Fever . . . . .	...	...	2	15.4	4	30.8	...	...	...	...	5	38.4	2	15.4	13
Puerperal Fever and Puerperal Pyrexia . . . . .	3	1.7	64	36.8	42	24.1	11	6.3	5	3.0	3	1.7	46	26.4	174
Cerebro-spinal Meningitis . . . . .	1	3.0	11	32.3	7	20.6	5	14.7	...	...	1	3.0	9	26.4	34
Totals . . . . .	122	3.4	944	26.4	1,159	32.5	508	14.2	189	5.3	394	11.0	258	7.2	3,574

## MOTOR AMBULANCE SERVICES.

The removal of cases of infectious disease to the City Hospital is carried out by three motor ambulances. The cars are maintained and garaged at the Hospital and are available night and day, the drivers living in the Hospital.

Transport to the three General Hospitals is undertaken partly by two ambulances belonging to the Public Assistance Department and partly by one ambulance controlled by the Public Health Department. The two Public Assistance ambulances also convey patients to Bangour Mental Hospital and Gogarburn Certified Institution. Daily transfers of patients from one hospital to another, and the conveyance of cases to the Royal Victoria Dispensary for X-ray and other treatment, have entailed an increasing burden on the ambulance service. To meet this need an old vehicle unsuited for ambulance work is shortly to be replaced by a new ambulance.

Police Ambulances are at the call of the citizens generally for the removal of accident cases to the Royal Infirmary and other Hospitals. The St. Andrew's Ambulance Association have three ambulances, which are sent on request to convey patients to nursing homes and other institutions.

## DISINFECTION.

The disinfection of houses after infectious disease, is undertaken by a special staff, who spray the apartments with a solution of formaldehyde. Motor vans are used for the conveyance of bedding and other infected articles to the disinfection station for treatment by formaldehyde gas or high pressure steam.

A statement is given below showing the number of dwelling houses disinfected during the last three years :—

	1932.		1933.		1934.	
	Number.	Apart-ments.	Number.	Apart-ments.	Number.	Apart-ments.
Dwelling-houses, etc. :—						
After Tuberculous Disease . . . .	804	987	950	1,310	872	1,234
„ other . . . . .	3,754	5,910	4,843	6,438	2,423	3,262

The number of articles dealt with at the disinfection station during the year are given in the following table :—

Description.	No. of Articles.		Description.	No. of Articles.	
	After Tuberculous Disease.	After Other Diseases.		After Tuberculous Disease.	After Other Diseases.
Mattresses and Palliasses . . . .	544	2,080	Body Clothes . . . . .	1,143	12,673
Blankets, Sheets, Quilts, etc. . .	1,766	7,809	Carpets and Rugs . . . . .	34	524
Beds, Pillows, Bolsters, etc. . .	1,340	3,578	Miscellaneous . . . . .	303	1,037
Curtains, Table Covers, Wraps, etc. . . . .	57	372	Destroyed by request . . . . .	884	238
Table Napery, Toilet Covers, Towels, etc. . . . .	44	905			
			Totals . . . . .	6,115	29,216

**Second-Hand Clothing.**—In past years considerable quantities of second-hand boots and clothing have been exported from Edinburgh to the Irish Free State. To comply with the regulations enforced by that country the exporter had to produce a certificate from the local Medical Officer of Health stating that the articles had been duly disinfected before despatch. If this procedure was not adopted the goods were admitted to the Free State only through certain specified ports, where the disinfection was carried out free of charge.

Owing to the heavy import duty now imposed, dealers have found it necessary to curtail this form of trading, and as a result only 2 consignments of second-hand clothing and boots were disinfected during the year. In 1933 there were 89 such consignments, and in 1932 the number was 141.

**Straw Packing.**—Straw used in the packing of goods for export to certain foreign countries must also be disinfected before leaving this country. The fumigation of 113 consignments was carried out at the Northern General Hospital during the year and the necessary certificates granted.

**Cleansing of Persons.**—Facilities for personal cleansing are provided at the Disinfecting Station. Of the 692 persons who availed themselves of the opportunity to attend for baths and disinfection of their clothing, 43 adults and 270 children suffered from scabies. A further 372 adults and 7 children were treated for verminous conditions.

## RECEPTION HOUSE.

The Reception House is kept ready to deal with any outbreak of smallpox or other disease necessitating the isolation of contacts. Fortunately, the building was not required during the year.

## INTERMENTS.

(In terms of Section 69, Public Health (Scotland) Act, 1897.)

Application was made in 197 instances by relatives of deceased persons for assistance towards the cost of interment. Careful enquiry was made in each case and as a result the claims of 12 applicants were rejected, while 17 others were withdrawn. The Department arranged for the burial of 168 persons at a cost of £297. 4s. Of that sum, £38. 7s. 5d. was recovered from relatives, leaving £258. 16s. 7d. to be met by the Local Authority.

The following statement shows the expenditure in connection with interments during the last five years :—

Year.	Number.	Total Cost of Interments and Removals.	Sums Recovered from Relatives	Net Expenditure.
1930 . . .	50	£138 15 6	£33 17 9	£104 17 9
1931 . . .	79	166 4 0	33 8 3	132 15 9
1932 . . .	144	254 8 0	58 0 5	196 7 7
1933 . . .	181	386 14 0	38 16 1	347 17 11
1934 . . .	168	297 4 0	38 7 5	258 16 7

## HOSPITAL EXPENDITURE.

The following table shows the cost per occupied bed in the hospitals under the control of the Public Health Department. The particulars apply in each case to the financial year to 15th May, 1934, and are based on the gross ordinary expenditure, excluding loan charges :—

Institution.	Daily Average Number of Occupied Beds.	Gross Ordinary Expenditure Year to 15th May 1934.	Cost per Occupied Bed per Week.
City Hospital . . . . .	656	£48,889	28 6
Western General Hospital . . . . .	234	26,624	43 7
Northern General Hospital . . . . .	273	16,502	23 1
Eastern General Hospital . . . . .	348	25,546	28 1
Royal Victoria Hospital . . . . .	71	7,050	38 —
Royal Victoria Farm Colony . . . . .	13	1,291	36 9
Victoria Park House . . . . .	19	1,500	29 5
Bangour Mental Hospital . . . . .	1,018	60,519	22 9
Gogarburn Certified Institution . . . . .	322	17,822	21 2

## PUBLIC HEALTH EXPENDITURE.

The increase in Public Health Expenditure consequent on the introduction of new schemes from time to time is shown in the following table.

Year.		Gross Expenditure.	Revenue.	Net Expenditure.
1909-10		£35,159	£699	£34,459
1910-11		34,869	718	34,150
1911-12		35,072	780	34,291
1912-13	T.B. Scheme begun.	37,618	2,690	34,927
1913-14		46,094	14,548	31,546
1914-15		56,768	18,716	38,051
1915-16		56,827	12,997	43,829
1916-17	C.W. Scheme begun.	58,323	23,216	35,107
1917-18		75,198	30,552	44,645
1918-19	V.D. Scheme begun.	99,563	43,029	56,533
1919-20		130,877	49,138	81,738
1920-21	Amalgamation with Leith.	210,875	89,098	121,777
1921-22		184,315	68,450	115,865
1922-23		146,395	67,477	78,917
1923-24		149,873	47,554	102,319
1924-25		156,155	48,949	107,206
1925-26		156,919	54,185	102,734
1926-27		157,895	56,439	101,455
1927-28		* 172,763	56,999	115,764
1928-29		* 177,008	60,512	116,496
1929-30		* 182,136	62,559	119,577
1930-31	Includes General Hospitals	* 394,088	48,070	346,018
1931-32	and Mental Institutions.	* 354,499	48,205	306,294
1932-33		* 381,293	82,596	298,697
1933-34		* 377,444	76,733	300,711

\* Interest and Debt Charges included.



## TUBERCULOSIS.

REPORT BY TUBERCULOSIS OFFICER.

A review of the work of the Tuberculosis Department for the year 1934 shows that steady progress has been made in the control and eradication of the disease.

Whilst it is gratifying to have to record a decrease in the total number of deaths and notifications for the past year, much still remains to be accomplished—the disease is still far too common in our midst and in spite of certain recent advances in knowledge concerning it, tuberculosis remains one of the great killing diseases and must still be regarded as one of our great Public Health problems.

It cannot be claimed, in any community, that the results of the campaign against tuberculosis are, in any degree, commensurate with the knowledge which has been accumulated concerning the disease. The organism causing tuberculosis has been known for upwards of fifty years. The various factors governing its habits of growth and dissemination, its powers of resistance, its favourite haunts and its methods of attack have all been investigated with a painstaking thoroughness, and yet, despite all this knowledge concerning the enemy, we have to face the grim fact that, during 1934, it killed in Edinburgh 382 persons. During the same period, according to official notifications received, it definitely maimed a further 794 people, and past experience has long taught us that the latter figure is but a modest estimate of the actual casualties sustained, for many cases of illness from infancy to old age which are actually due to tuberculosis, are for varying periods, wrongly attributed to other causes.

The danger and resultant damage are everywhere accomplished. The remedy is simple—prevention. Tuberculosis never arises *de novo*. It must arise from a pre-existing case in man or animal, and every new case so arising should be regarded as a social crime which could and should have been prevented. The “open case” of tuberculosis—especially the advanced consumptive—is the great *fons et origo* of the disease and therein lies the secret of success. Present-day difficulties—mainly legislative, economic and social—prevent anything approaching wholesale isolation and segregation of the infective case of tuberculosis, which, were it possible of attainment, would accomplish the eradication of this disease in the lifetime of the present generation.

Failing this expedient, the main hope, in the absence of a specific remedy or immunising agent, lies in reducing the spread of infection by steady improvement in the housing conditions of the people combined with careful supervision of those, especially the young, who are definitely proved to have been infected, for it must be realised that the infected child of to-day is the consumptive of to-morrow. It is because of this acknowledged fact that I would earnestly plead for the provision of a “Preventorium” as a useful addition to the already existing units of the anti-tuberculosis scheme.

The “Preventorium,” as the name implies, is primarily intended for the prevention of tuberculosis, and to such an Institution would be admitted the delicate children from known infected homes, so that the dreaded certainty of repeated infection, with its dire consequences, could be definitely eliminated. To such an Institution would also be admitted young children who have been debilitated by such diseases as measles,

whooping cough, etc., and, in consequence, rendered peculiarly receptive to infection by the tubercle bacillus. A period of residence in a "Preventorium" for such cases would definitely tend to ensure a solid constitutional defence against the ultimate serious consequences of repeated tuberculous infection.

During the year 1934, there was a decrease of 17 in the number of notifications of cases of pulmonary tuberculosis, the figures being 536 as compared with 553. The incidence rate (1·2) remains the same as last year. Of the cases notified, no less than 44·6 per cent. were found to be between the ages of 20 and 35. An analysis of the housing conditions relative to these notified cases revealed the fact that 68·8 per cent. of them were occupying houses of three rooms or less.

During the past year, there was a decrease of 20 in the number of deaths from pulmonary tuberculosis—the actual number being 302—which is the lowest ever recorded for the City and is equivalent to a death rate of ·66 per 1000. As in former years, more males than females died of the pulmonary form of the disease, the number being 170 as compared with 132. The highest death rate occurred in the Liberton Ward (1·2 per 1000), which is a decided increase in the rate as compared with the figures for the same ward in previous years. This increase is presumably due to the transfer into this area of tuberculous patients from other districts to the new Niddrie Mains Housing Scheme. The other wards showing a high death rate are :—North Leith (1·1) ; St. Giles (1·0) ; St. Leonard's (1·0) ; and Colinton (1·0).

The death rate from pulmonary tuberculosis has been more than halved in the last thirty-four years, seven persons dying per 10,000 of the population in 1934 as compared with 18 per 10,000 in 1900.

There was a slight increase in the number of deaths from the non-pulmonary forms of tuberculosis during the past year, the figures being 80 as compared with 77 for 1933. The death rate remains the same as for the previous year. Of the total number of deaths from the non-pulmonary forms of the disease 64 per cent. were females and 41 per cent. referred to children under 10 years of age.

Every endeavour is made to emphasise the importance of early diagnosis and treatment in all cases of tuberculosis, but a discouraging feature is still the comparatively large number of patients who first report for examination in an advanced stage of the disease.

During the year 1,039 patients were referred to the Tuberculosis Officer for examination and opinion regarding the possible presence of tuberculosis—of that number 966 were suspected of lung tuberculosis and the remaining 73 were cases of suspected non-pulmonary tubercle. Complete investigation of these patients revealed 49·0 per cent. of the former and 71·2 per cent. of the latter class to be actually suffering from active tuberculous disease necessitating treatment.

A more detailed description of the activities of the various Institutions will be found in the following pages.

I have to acknowledge with sincere and grateful thanks the willing help and loyal co-operation I have received from all members of the Tuberculosis staff in carrying out the work of the Department.

## PULMONARY TUBERCULOSIS.

**Notifications.**—After making the necessary adjustments for outward and inward transfers, the number of Edinburgh citizens reported to the Department during the year as suffering from pulmonary tuberculosis was 536.

Whilst a reduction is noted in the actual number of cases as compared with the previous year, the incidence rate of 1·2 per 1000 of the estimated population remains the same.

The disease became generally notifiable in 1912. During that year there were 1255 cases, the highest ever recorded for the City. In 1920—the year prior to amalgamation with Leith and an area comprising Liberton, Colinton and Corstorphine, etc., formerly attached to the County of Midlothian—the notifications totalled 616, whilst in 1932, despite the addition of 100,000 to the population, the figure had dropped to 513, and this represents the lowest number that has yet been returned in any one year.

Of the 536 cases intimated during 1934, 290 were males and 246 females, as compared with 309 and 244 respectively in the previous year. In the accompanying table the patients are grouped according to sex and age.

Sex.	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70 and over.	Total.
Male	5	5	10	15	39	41	40	16	28	21	29	18	16	7	...	290
Female	7	7	8	31	47	43	29	16	13	11	9	14	6	5	...	246
Total	12	12	18	46	86	84	69	32	41	32	38	32	22	12	...	536

Persons under the age of 25 years represented 32 per cent. of the cases reported. The notifications are herewith arranged according to municipal wards :—

	Notifi- cations.	Rate per 1000.		Notifi- cations.	Rate per 1000.
Calton	30	1·3	George Square	34	1·6
Canongate	25	1·1	St. Leonard's	34	1·6
Newington	13	·6	Portobello	38	1·4
Morningside	18	·8	South Leith	27	·9
Merchiston	19	·9	North Leith	30	1·5
Gorgie	20	·8	West Leith	11	·6
Haymarket	13	·7	Central Leith	21	1·5
St. Bernard's	17	·9	Liberton	23	2·1
Broughton	23	1·5	Colinton	12	1·7
St. Stephen's	16	·9	Corstorphine and Cramond	13	1·0
St. Andrew's	10	·9	Institutions (other than Sanatoria)	13	...
St. Giles	45	2·1	Military Quarters	4	...
Dalry	27	1·3			



Every effort is made by the Department to emphasise the prime importance of the examination of all contacts—young and old alike—from infected homes. Unfortunately, in some cases, some reluctance is felt by contacts in submitting themselves to examination and in other cases a definite refusal is given. It is felt that the success of the attack on the tuberculosis problem would be much increased if powers were granted to enforce the examination of all contacts. Such examination could be readily accomplished either at the patient's home or the dispensary.

Tuberculosis is a disease associated amongst other things with inferior housing conditions, and as will be seen from the foregoing table, the districts where such conditions exist invariably produced the highest incidence. St. Giles, George Square, St. Leonard's, Calton and Canongate wards are all associated with unhealthy surroundings, and it is again to be recorded that a large majority of the sufferers resided in these areas.

In the following table the type of house occupied by the infected persons is shown :

1-roomed house.	2-roomed house.	3-roomed house.	4 rooms and over.	Lodging-Houses.	Institutions, Etc.	Total.
48	174	147	123	24	20	536

**Deaths.**—It is gratifying to be able to report a further reduction in the number of deaths from the disease. The total of 302 for 1934 represented a death rate of ·66 per 1000 of the population, and is the lowest ever recorded for the City. In the previous year there were 322 deaths, and a rate of ·71. By way of illustrating the progress being made in the fight against tuberculosis, it is interesting to compare the pulmonary tuberculosis death-rate per 10,000 living in 1900 with that of 1934. In the former year, out of every 10,000 of the population, 18 persons died, whereas in the latter there were only 7 deaths per 1000.

The following table shows the number of deaths from pulmonary tuberculosis intimated annually since 1924 :—

YEAR.	Number of Deaths.	Rate per 1000.	Sex.		Age-periods.							
			Male.	Female.	Under 15 years.	15 and under 20 years.	20 and under 25 years.	25 and under 35 years.	35 and under 45 years.	45 and under 55 years.	55 and under 65 years.	65 yrs. and up-wards.
1924	424	1·0	225	199	19	29	57	104	83	69	28	35
1925	401	·9	215	186	21	29	57	82	83	66	45	18
1926	356	·8	201	155	18	31	35	84	59	56	42	31
1927	381	·9	193	188	23	26	51	83	71	67	40	20
1928	345	·8	195	150	20	40	40	69	70	54	38	14
1929	362	·8	198	164	19	30	47	80	69	56	42	19
1930	333	·8	174	159	15	17	49	67	60	62	45	18
1931	326	·7	185	141	16	24	41	61	63	58	41	22
1932	313	·7	170	143	12	10	40	90	59	52	31	19
1933	322	·7	185	137	12	20	41	84	55	54	35	21
1934	302	·7	170	132	18	16	31	79	50	50	41	17



The number of deaths during 1934, together with the ward death-rates, sex and age, are shown in the next table:—

WARDS.	Number of Deaths.	Rate per 1000.	Sex.		Age-periods.																
			Male.	Female.	Under 15 years.		15 and under 20 years.		20 and under 25 years.		25 and under 35 years.		35 and under 45 years.		45 and under 55 years.		55 and under 65 years.		65 yrs. and up- wards.		
					M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Calton . . . . .	18	·8	12	6	1	1	...	...	...	1	4	2	1	1	4	1	1	2	...	1	...
Canongate . . . . .	19	·9	8	11	...	1	...	...	...	1	1	3	3	1	2	1	1	2	...	3	...
Newington . . . . .	6	·3	2	4	1	...	...	...	...	...	...	...	1	...	1	...	...	3	...	...	...
Morningside . . . . .	12	·5	5	7	...	...	...	...	...	1	...	...	1	3	2	...	2	2	...	...	1
Merchiston . . . . .	3	·1	...	3	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Gorgie . . . . .	12	·5	7	5	1	...	...	...	...	1	1	2	3	...	1	1	1	1	...	...	...
Haymarket . . . . .	9	·5	6	3	...	...	...	...	1	2	...	1	2	...	1	...	1	...	1	...	...
St Bernard's . . . . .	12	·7	7	5	...	...	...	...	2	...	2	3	1	...	...	...	1	...	1	2	...
Broughton . . . . .	2	·1	1	1	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...
St. Stephen's . . . . .	13	·7	10	3	...	...	...	...	...	1	5	1	1	...	2	...	1	...	1	1	...
St. Andrew's . . . . .	8	·7	4	4	1	...	...	...	...	2	1	...	1	...	1	...	1	1	...	...	...
St. Giles . . . . .	22	1·0	15	7	...	...	1	2	...	2	3	4	...	4	1	4	1	...	...	...	...
Dalry . . . . .	17	·8	10	7	1	1	...	...	1	3	1	1	2	3	1	2	3	1	...	...	...
George Square . . . . .	15	·7	8	7	...	1	...	...	1	1	1	3	1	1	4	1	1	...	1	...	...
St. Leonard's . . . . .	21	1·0	14	7	...	...	3	1	1	4	1	2	2	5	...	...	1	...	1	...	...
Portobello . . . . .	24	·9	13	11	...	1	1	...	...	3	4	2	3	1	1	2	4	2	...	...	...
South Leith . . . . .	11	·4	7	4	...	...	...	...	...	3	2	1	2	2	...	1	...	...	2	1	...
North Leith . . . . .	22	1·1	13	9	1	...	1	1	2	2	3	5	2	2	...	2	1	...	2	1	...
West Leith . . . . .	11	·6	4	7	...	2	2	...	...	...	2	1	...	...	2	1	1	...	...	...	...
Central Leith . . . . .	11	·8	5	6	...	1	...	...	2	3	1	...	2	2	...	2	1	...	...	...	...
Liberton . . . . .	13	1·2	7	6	...	...	2	1	1	2	1	1	1	1	...	2	1	...	...	...	...
Colinton . . . . .	7	1·0	4	3	...	1	...	...	1	1	...	...	1	1	...	1	...	...	...	...	...
Corstorphine and Cramond . . . . .	7	·6	2	5	...	1	...	...	...	1	1	1	...	...	1	1	...	...	...	...	1
Institutions (other than Sanatoria) . . . . .	6	...	5	1	1	...	...	1	...	...	1	...	1	...	...	...	1	...	1	...	...
Military Quarters . . . . .	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Totals . . . . .	302	·7	170	132	7	11	5	11	11	20	42	37	30	20	39	11	26	15	10	7	...
Edinburgh Area . . . . .	213	·6	122	91	5	6	2	5	6	15	29	25	23	14	30	8	20	13	7	5	...
Leith Area . . . . .	55	·6	29	26	1	3	3	3	2	2	9	10	4	4	6	2	2	1	2	1	...
Suburban Area . . . . .	27	·9	13	14	...	2	...	2	2	3	3	2	2	2	3	1	3	1	...	1	...
Institutions . . . . .	6	...	5	1	1	...	...	1	...	1	...	1	...	...	...	1	...	...	1	...	...
Military Quarters . . . . .	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...

**Deaths in Relation to Notification.**—The deaths from pulmonary tuberculosis since 1924 are classified to show the lapse of time between notification and death:—

Year.	Within 1 month.	From 1 to 3 months.	From 3 to 6 months.	From 6 months to 1 year.	From 1 to 2 years.	Over 2 years and under 3.	Over 3 years and under 4.	From 4 years upwards.	Notified after Death.	Total
1924 . . . . .	49	48	49	51	67	34	21	49	56	424
1925 . . . . .	57	47	35	38	48	28	14	47	87	401
1926 . . . . .	49	42	36	38	42	27	11	42	69	356
1927 . . . . .	46	41	28	47	60	30	14	47	68	381
1928 . . . . .	56	41	23	26	47	26	14	51	61	345
1929 . . . . .	53	33	39	36	52	23	11	53	62	362
1930 . . . . .	56	34	26	29	53	14	14	39	68	333
1931 . . . . .	47	33	27	25	43	26	20	50	55	326
1932 . . . . .	38	42	25	28	37	33	7	48	55	313
1933 . . . . .	32	43	29	30	49	36	19	49	35	322
1934 . . . . .	42	34	21	42	38	24	16	38	47	302

It is regrettable that year after year so many cases should first come to our knowledge either when the disease is far advanced or through the medium of the Registrar's weekly death returns.

The attention of the Medical Profession is again called to the need for immediate notification of the existence of the disease to the Medical Officer of Health; then, and only then, can the appropriate measures—curative and prophylactic—be taken.

## NON-PULMONARY TUBERCULOSIS.

**Notifications.**—There were 258 cases of non-pulmonary tuberculosis intimated during the year, representing an incidence rate of '6 per 1000 of the estimated population.

The following summary shows the number of cases reported annually since 1924 :

1924	.	.	.	.	455 or 1·1 per 1000
1925	.	.	.	.	498 or 1·2 „
1926	.	.	.	.	433 or 1·0 „
1927	.	.	.	.	359 or ·8 „
1928	.	.	.	.	347 or ·8 „
1929	.	.	.	.	317 or ·7 „
1930	.	.	.	.	295 or ·7 „
1931	.	.	.	.	254 or ·6 „
1932	.	.	.	.	272 or ·7 „
1933	.	.	.	.	243 or ·5 „
1934	.	.	.	.	258 or ·6 „

The age and sex of the notified cases are shown in the following table :—

Sex.	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70 and over.	Total.
Male . . .	19	29	23	16	7	9	8	2	4	2	...	3	5	1	3	131
Female . . .	18	16	16	13	15	13	5	3	6	6	8	4	2	1	1	127
Totals . . .	37	45	39	29	22	22	13	5	10	8	8	7	7	2	4	258

Children under 10 years of age formed the largest proportion, 32 per cent. of the total being represented in this group. The health of these young children has been receiving much attention within recent years, and many who would otherwise have passed on to a life of invalidism and early death are restored to a life of useful activity.

In the following table, the cases are classified to show the part of the body affected by the disease :—

Glands . . . . .	75	Joints—	
Abdomen . . . . .	65	Hip . . . . .	10
Meninges and Brain . . . . .	39	Knee . . . . .	6
Genito-Urinary . . . . .	14	Ankle . . . . .	2
Spine . . . . .	22	Shoulder . . . . .	1
General . . . . .	2	Elbow . . . . .	1
Lupus . . . . .	5		— 20
	— 222		
Bones (except Spine)—			
Hand . . . . .	1		
Thigh . . . . .	2		
Foot . . . . .	2		
Leg . . . . .	2	Others . . . . .	7
Rib . . . . .	2		
	— 9	Total . . . . .	258

**Deaths.**—The deaths from all forms of non-pulmonary tuberculosis numbered 80 or ·17 per 1000 of the population, as compared with 77 and ·17 in 1933 and 100 or ·22 in 1932. The sex, age at death, and the organ or region affected by the disease are tabulated below :—

Cause of Death.	All Ages.			Age Periods.											
	Both Sexes.	Males.	Females.	-1	1-	5-	10-	15-	25-	35-	45-	55-	65-	75 and over.	
Tuberculous Meningitis . . . . .	35	18	17	7	10	6	2	7	1	...	...	...	2	...	
Tuberculosis of Intestines and Peritoneum . . . . .	17	3	14	...	...	2	2	1	3	2	4	2	1	...	
"  "  Vertebral Column . . . . .	6	2	4	...	...	...	...	...	2	1	...	3	...	...	
"  "  Other Bones and Joints . . . . .	1	...	1	...	...	1	...	...	...	...	...	...	...	...	
"  "  Skin . . . . .	1	...	1	...	...	...	...	...	...	...	...	1	...	...	
"  "  Lymphatic System . . . . .	3	1	2	1	...	...	1	...	...	...	...	...	...	1	
"  "  Genito-urinary System . . . . .	4	1	3	...	...	...	...	...	3	...	1	...	...	...	
Disseminated Tuberculosis, acute and chronic . . . . .	9	4	5	1	4	...	...	...	1	...	1	2	...	...	
Other Non-Pulmonary Tuberculosis . . . . .	4	...	4	...	...	1	...	...	...	2	1	...	...	...	
Totals . . . . .	80	29	51	9	14	10	5	8	10	5	7	8	3	1	

The death-rates quoted herewith are extracted from the Registrar-General's preliminary statement for 1934, and enable a comparison to be made with Edinburgh and other large centres of population :—

Death rate per 1000.			Death rate per 1000.		
Town.	Pulmonary Tuberculosis.	All forms of Tuberculosis.	Town.	Pulmonary Tuberculosis.	All forms of Tuberculosis.
Glasgow . . . . .	·79	1·00	Paisley . . . . .	·64	·92
Edinburgh . . . . .	·66	·84	Greenock . . . . .	·79	1·00
Dundee . . . . .	·54	·80	Motherwell & Wishaw . . . . .	·42	·67
Aberdeen . . . . .	·52	·65	Clydebank . . . . .	·54	·68

## INSTITUTIONAL TREATMENT.

The total number of beds provided for the residential treatment of tuberculosis patients at the various municipal hospitals is as follows :—

Royal Victoria Hospital, Pulmonary Tuberculosis . . . . .	76 beds.
Polton Farm Colony . . . . .	18 "
Colinton Mains Hospital . . . . .	148 "
"  "  "  Non-pulmonary Tuberculosis . . . . .	73 "
Total . . . . .	<u>315 beds.</u>

**Royal Victoria Hospital.**—This institution which was specially designed as a tuberculosis sanatorium, has accommodation for 76 patients and is reserved for the reception of persons, both male and female, in the early stages of pulmonary tuberculosis.

As the demand for admission has always been heavy, it has been our endeavour to select only those who are most likely to derive the maximum amount of benefit. For those adult patients capable of doing light work, suitable facilities under medical supervision are provided, with beneficial results.

Advantage is taken at this hospital to try such new remedies as might prove beneficial in the treatment of pulmonary tuberculosis. The beneficial effects resulting from artificial pneumothorax treatment in suitably selected cases has led to the more extensive use of this form of therapy. During the past year 13·4 per cent. of the patients undergoing treatment in the institution were submitted to collapse therapy with, in most cases, gratifying results. In a few cases the pneumothorax treatment was combined with aurotherapy in one or other of its forms. After discharge the patients report at the hospital at appropriate intervals for the necessary refills—in this way the treatment is continued along effective lines, whilst in no way interfering with the patients' ability to pursue his occupation. An encouraging feature of this form of collapse therapy is the frequency with which a case formerly infective can be rendered non-infective by disappearance of bacilli from the sputum. The complete abolition of the infective potential in such cases is a matter of considerable importance from the public health point of view as such patients no longer constitute a serious menace to the health of those with whom they are intimately associated at home or at work.

The structural alterations noted in last year's annual report have added greatly to the comfort of the inmates and a great improvement in accommodation has resulted.

The following table shows the number of patients treated in the hospital during the year :—

	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Men . .	26	72	67	...	31
Women . .	34	66	64	...	36
Children .	5	11	13	...	3
Totals .	65	149	144	...	70

In the course of the year, 144 patients were discharged. A number of patients were admitted for observation purposes and 23 of these were ultimately found to be suffering from conditions other than pulmonary tuberculosis.

The particulars attached herewith refer only to those finally diagnosed as true cases of the disease :—

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males . . . .	...	3	6	5	25	10	7	2	1	59
Females . . . .	...	1	5	11	27	13	3	1	1	62
Totals . . . .	...	4	11	16	52	23	10	3	2	121

The average length of residence of the discharged patients was 146 days.

**Colinton Mains Hospital.**—Accommodation is provided at this hospital for the treatment of all forms of tuberculosis, 148 beds being reserved for pulmonary tuberculosis and 73 for non-pulmonary cases.



**Pulmonary Tuberculosis.**—The majority of patients selected for admission are generally in an advanced stage of the disease. In a large percentage of the cases, it is too well established to permit of permanent cure. Many, however, respond wonderfully to a course of treatment and return to their homes greatly improved in health. Visiting nurses attend them there and advice and treatment are given where necessary by the medical staff of the Department.

There were 132 deaths, representing 26 per cent. of those treated in hospital during the year, while 244 were discharged.

The beds temporarily vacated last year to provide accommodation for scarlet fever patients have been restored to their original purpose.

The following table shows the number of patients dealt with in the course of the year :—

	Remained at 1st January.	Admitted	Discharged.	Died.	Remaining at 31st December.
Men . . .	78	230	134	88	86
Women . . .	46	141	103	41	43
Children . . .	3	7	7	3	...
Totals . . .	127	378	244	132	129

The duration of treatment of the discharged patients averaged 122 days. Of the 376 patients who died or were discharged from hospital, 13 were found to be suffering from diseases other than tuberculosis.

The age and sex of the remaining 363 patients were as under :—

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males . . . . .	...	3	4	14	45	45	54	35	18	218
Females . . . . .	...	2	3	20	59	27	18	12	4	145
Totals . . . . .	...	5	7	34	104	72	72	47	22	363

**Non-Pulmonary Tuberculosis.**—There were 107 cases of non-pulmonary tuberculosis admitted to the hospital during the year, and in 22 or 20·5 per cent. of these, the disease was located in the spine. In 13 or 12·1 per cent. of the cases, the hip joint was affected, while 27 or 25·2 per cent. suffered from abdominal tuberculosis.

The following table shows the number of patients dealt with during the year :—

Sex.	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Males . . .	37	60	57	5	35
Females . . .	36	47	47	9	27
Totals . . .	73	107	104	14	62

The sex and age distribution of the patients admitted was :—

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males . . . . .	6	13	11	9	7	8	1	3	2	60
Females . . . . .	3	6	3	8	9	3	6	8	1	47
Totals . . . . .	9	19	14	17	16	11	7	11	3	107

The part affected by the disease in the 107 patients admitted to hospital was a under :—

Part Affected.	Males.	Females.	Part Affected.	Males.	Females.
Abdomen . . . . .	14	13	Knee . . . . .	2	5
Spine . . . . .	10	12	Kidney . . . . .	1	1
Spine and Hip . . . . .	2	...	Lupus . . . . .	1	...
Genito-Urinary . . . . .	5	...	Hand (dactylitis) . . . . .	1	...
Hip . . . . .	7	6	Rib . . . . .	4	2
Tuberculoma . . . . .	3	...	Cervical Glands . . . . .	5	6
Sacro-iliac . . . . .	1	...	Multiple . . . . .	1	...
Pectoral Abscess . . . . .	1	...	Foot . . . . .	1	2
Empyema . . . . .	1	...	Totals . . . . .	60	47

Results with regard to patients discharged or dying during the year :—

Parts Affected on Admission.	Males.	Appar-ently Cured.	Im-proved.	Not Im-proved.	Died.	Females.	Appar-ently Cured.	Im-proved.	Not Im-proved.	Died.	Totals.
Abdomen . . . . .	10	6	2	...	2	15	...	9	3	3	25
Elbow . . . . .	1	1	...	...	...	...	...	...	...	...	1
Foot . . . . .	...	...	...	...	...	1	...	1	...	...	1
Glands . . . . .	6	5	1	...	...	2	...	2	...	...	8
Hip . . . . .	8	...	8	...	...	8	...	7	...	1	16
Knee . . . . .	8	3	5	...	...	6	...	6	...	...	14
Spine . . . . .	14	4	5	3	2	20	...	12	3	5	34
Rib . . . . .	3	2	1	...	...	1	...	1	...	...	4
Kidney . . . . .	1	...	1	...	...	1	...	1	...	...	2
Sacro-iliac . . . . .	2	...	2	...	...	...	...	...	...	...	2
Generalised . . . . .	1	...	...	...	1	...	...	...	...	...	1
Dactylitis . . . . .	1	...	1	...	...	...	...	...	...	...	1
Urethra . . . . .	2	1	1	...	...	...	...	...	...	...	2
Epididymis . . . . .	2	...	2	...	...	...	...	...	...	...	2
Thyroid . . . . .	1	...	1	...	...	...	...	...	...	...	1
Empyema . . . . .	1	...	1	...	...	...	...	...	...	...	1
Brain (tuberculoma) . . . . .	1	...	1	...	...	...	...	...	...	...	1
Rectum . . . . .	...	...	...	...	...	1	...	1	...	...	1
Skin . . . . .	...	...	...	...	...	1	1	...	...	...	1
Totals . . . . .	62	22	32	3	5	56	1	40	6	9	118

The parts affected by the disease in patients who died, together with the ultimate cause of death were :—

Part Affected.	Ultimate Cause of Death
Males—	
Spine and Lung . . . . .	1 Pulmonary Tuberculosis.
Spine . . . . .	1 Acute Phthisis and Generalised T.B.
Abdomen and Lung . . . . .	2 Generalised T.B.
Generalised . . . . .	1 Intercurrent Infection.
Females—	
Spine . . . . .	5 Generalised Tuberculosis (4), Acute Phthisis (1).
Abdomen . . . . .	3 Tubercular Meningitis (1), Generalised T.B. (2).
Hip . . . . .	1 Generalised Tuberculosis.

The results in the treatment of non-pulmonary tuberculosis by Ultra-Violet ray therapy continue to be most encouraging. In patients, especially those suffering from abdominal or glandular tuberculosis, great benefit has been derived after a series of exposures to the arc lamps.

The illustration facing page 30 shows one of the two new pavilions recently opened at the City Hospital for the treatment of non-pulmonary forms of tuberculosis. The new buildings take the place of old ones erected in 1912 and are designed to give the maximum amount of fresh air and sunshine. All the beds can be easily wheeled into the open air.

**Polton Farm Colony.**—The patients selected for a course of treatment at this colony are encouraged to take an interest in the work of the farm. The spheres of out-door activity include pig-rearing, poultry-keeping and market gardening. A farm grieve superintends the training of the patients and the experience gained is frequently of value to those who wish to continue these occupations after discharge from the institution.

There were 24 patients in residence during the year.

The expenditure for the upkeep of the institution and the farm for the year to 15th May, 1934, was £2,680, while the revenue from the sale of pigs, poultry, eggs, etc., for the same period was £1,871—representing a loss of £809 during the year.

## TUBERCULOSIS DISPENSARIES.

The dispensaries at Spittal Street and South Fort Street, Leith, have long established their usefulness in the treatment and control of tuberculosis.

During the past year 1,039 patients were referred to the Tuberculosis Officer for opinion regarding the possible presence of tuberculosis. Of that number 966 were suspected of pulmonary tubercle and the remaining 73 were suspected of possible non-pulmonary tuberculosis in one or other form.

Complete investigation revealed 473 positive cases in the former group—representing 49·0 per cent. and in the non-pulmonary cases, 52 patients representing 71·2 per cent. were found to be actually suffering from a surgical tuberculous lesion.

Heavy calls are made on the services of the medical and nursing staff, and the following attendance figures will give some idea of the work undertaken.

		New Cases.		Old Cases.	
		Edinburgh.	Leith.	Edinburgh.	Leith.
Men . . .	711	63	3,883	806	
Women . . .	715	108	3,833	810	
Children . . .	914	220	3,765	864	
Totals . . .	2,340	391	11,481	2,480	

**Home Visitation.**—There were 13,759 domiciliary visits paid to patients during the year. The number in each month is shown below :—

	Insured.	Not Insured.	Total.
January . . .	620	713	1,333
February . . .	491	756	1,247
March . . .	573	784	1,357
April . . .	559	672	1,231
May . . .	566	655	1,221
June . . .	555	579	1,134
July . . .	562	508	1,070
August . . .	409	400	809
September . . .	396	393	789
October . . .	552	651	1,203
November . . .	595	733	1,328
December . . .	494	543	1,037
Totals . . .	<u>6,372</u>	<u>7,387</u>	<u>13,759</u>

Advice is given to persons before discharge from hospital to attend at the tuberculosis dispensary for further examination and treatment if necessary, and many avail themselves of this opportunity.

**Artificial Sunlight Treatment.**—At the Royal Victoria Dispensary is installed an Ultra-Violet ray unit consisting of four open carbon arc lamps and one mercury vapour lamp. Each day, three separate sessions are held for the treatment of young children, men and women. During the winter and spring months the accommodation for the treatment of these patients is fully taxed. This form of treatment is exclusively reserved for patients suffering from the non-pulmonary forms of tuberculosis and it is gratifying to have to report highly satisfactory results in the vast majority of cases. Of the 314 patients who attended at the Royal Victoria Dispensary for this form of treatment, 276 were medical cases and 38 surgical. The number of exposures made during the year was 14,573.

**Extra Nourishment.**—The powers granted to local authorities some years ago enabled the Tuberculosis Officer to prescribe a regular supply of milk, fresh eggs and butter in cases where patients were not able to provide these necessities for themselves. The treatment usually covers a period of two months, during which the patients are kept under periodical review. Where improvement is noted, and the Tuberculosis Officer considers it desirable, renewal of the supplies is granted on application being made.

**Drugs.**—All necessary drugs and medicines are granted free to patients attending the tuberculosis dispensaries. The cost of prescriptions issued by medical practitioners to tuberculosis patients residing in their own homes is also borne by the local authority. A system of checking these prescriptions is undertaken by the Central Checking Bureau for Scotland in order to secure uniformity in pricing.

In 1934 the number so priced was 1,742 and the cost of medicines was £178, 4s. 5d





*"Evening Dispatch" Photograph.*

CITY HOSPITAL—WARD 12.

One of two New Pavilions for the Treatment of Non-Pulmonary Tuberculosis.



# CITY HOSPITAL FOR INFECTIOUS DISEASES.

## REPORT BY MEDICAL SUPERINTENDENT.

During the year there were 4,530 patients admitted to the wards, of whom 429 were suffering from tuberculosis. The above total includes cases admitted from districts outwith the City boundaries. The greatest number treated in hospital on any one day was 763. The average daily number under treatment was 504.

The scarlet fever admission rate was unusually high during the first quarter of the year—the tail of the great epidemic of 1933. The diphtheria incidence and fatality rate was again comparatively low. Apparently the “gravis” type of infection has not so far gained a hold in this area. We were unable to find clinical evidence of diphtheria in 42.57 per cent. of the 909 patients admitted to the wards. No fewer than 48 individuals admitted to hospital, either as “carriers” or “positive diphtheria” cases, were subsequently proved to be harbouring non-virulent organisms. The expected epidemic of measles kept the hospital well occupied until midsummer.

**Health of Staff.**—The following infectious diseases were contracted by members of the nursing staff during the course of their duties :—Measles (3) ; tuberculosis (2) ; erysipelas (1) ; mumps (1) ; whooping cough (1) ; chickenpox (1). One nurse died from pulmonary tuberculosis.

The complete freedom of the staff from diphtheria and scarlet fever during the year testifies to the efficacy of routine active immunization.

**Training of Nurses.**—Of 55 nurses who completed their training during the year 45 went to various hospitals for general training, and 6 obtained posts as staff nurses. Forty-seven nurses passed the State Examination.

**Teaching.**—Two hundred and seventy undergraduates attended clinics at the hospital. These were divided into six sections entailing 90 hours' instruction. Two courses were held for 18 candidates for the Diploma in Public Health. Three meetings were held during the summer vacation for post-graduate instruction. Including lectures to the nursing staff, 236 hours were devoted to teaching during the course of the year.

The epidiascope provided during the course of the year has greatly facilitated the teaching of students and nurses.

**Medical Staff.**—Dr. C. E. Scott, F.R.C.S., had a very busy time, particularly during the first quarter of the year. The incidence of acute mastoid suppuration was excessively high—59 mastoidectomies being performed. Grossly infected tonsils and adenoids were removed from 192 patients.

Mr Illingworth, F.R.C.S., has been most helpful with surgical cases of all types and performed several major operations.

Dr. A. L. K. Rankin, who had acted as Senior Assistant to the hospital for six years, left us in July to take up a post in England. His departure meant a serious loss to the hospital.

Dr. Cuthbert carried out the duties of the senior post with tact and efficiency for four months prior to Dr. Pearson taking up the appointment.

The various junior resident medical officers performed their ward duties in a keen and conscientious manner.

**Nursing and General Staff.**—The nursing and domestic staff is the backbone of a hospital. This hospital is exceedingly fortunate in having not only a highly efficient staff, but a staff which pulls together. It is with pleasure that I acknowledge my indebtedness to the members of the staff from the Matron downwards for their loyal co-operation during the year.

**Structural Alterations.**—The reconstruction of Pavilion 27 (female surgical tuberculosis), entailing re-orientation, extra balcony provision, new light room and plaster room, etc., was completed during the year. The alterations have improved the amenity and added to the efficiency of this department.

I append the usual reports relating to the various infectious diseases treated in the hospital.

## DIPHTHERIA.

Of 909 cases admitted to the diphtheria pavilions, 522 were finally diagnosed as suffering from diphtheria. The addition of two cases, one erroneously diagnosed as suffering from scarlet fever and one as cerebro-spinal meningitis, brings the diphtheria total, including 3 country cases, to 524. No clinical evidence of diphtheritic infection could be detected in 387 cases; 264 were regarded as "carriers" or "bacteriological diphtheria," whilst 123 were found to be suffering from other diseases. Among the latter group were 8 cases of scarlet fever, 8 of measles, 2 of cerebro-spinal meningitis and 1 of tubercular meningitis.

Twenty-four of the diphtheria patients suffered from an intercurrent infection, namely, hæmolytic streptococcal tonsillitis in 15, scarlet fever in 4, chickenpox in 4, and whooping cough and chickenpox in 1.

There were 24 deaths ascribed to diphtheria; 8 patients died within 24 hours of admission. The fatality rate calculated on actual clinical cases was 4.58 per cent. Excluding laryngeal cases the fatality rate was 4.05 per cent. The mortality rate of 27 laryngeal cases was 14.81 per cent. (4 deaths). Sixteen deaths (66.6 per cent.) occurred in patients who first came under treatment on or after the fourth day of disease.

	No.	Deaths.
Total number of laryngeal cases of diphtheria . . . . .	27	4
Cases which did not require operative treatment . . . . .	12	1
Cases treated by aspiration only . . . . .	2	0
Cases intubated following aspiration . . . . .	12	2
Cases tracheotomied following aspiration and intubation . . . . .	1	1



Of the four laryngeal deaths one occurred within 24 hours of admission, and one was due to cardiac paresis on the eighth day of disease.

The paralysis rate, excluding cardiac involvement, was 5.35 per cent.

Serum rashes were noted in 51 cases (9.73 per cent.).

Table showing age and sex of diphtheria patients :—

Age—Period in Years.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50+ years.	Total.
Recovered	Males .	2	2	11	16	24	87	43	8	5	5	...	...	203
	Females .	...	1	9	21	25	121	59	10	36	10	4	1	297
Died	Males .	...	1	3	1	1	7	2	...	...	...	...	...	15
	Females .	...	1	...	2	2	4	...	...	...	...	...	...	9
Total .		2	5	23	40	52	219	104	18	41	15	4	1	524

Diphtheria fatality rate, 4.58 per cent.

## SCARLET FEVER.

During the year there were 1,927 cases admitted to the hospital notified as suffering from scarlet fever. The diagnosis was confirmed in 1,766 cases. The addition of 8 cases notified as diphtheria, 4 as measles and 1 as chickenpox brings the scarlet fever total to 1,779.

Amongst the 161 cases erroneously diagnosed, the following diseases were noted : Tonsillitis (53) ; erythema (23) ; measles (30) ; chickenpox (8) ; pneumonia (8) ; mastoid (2) ; puerperal fever (2) ; mumps (1) ; diphtheria (1) ; otitis media (1) ; catarrh (1).

The case mortality was 0.78 per cent. (14 deaths). One patient suffering from toxic scarlet fever died within a few hours of admission to hospital.

In seven patients the scarlatinal infection played a very minor part in the fatal issue, death being actually due to :—Tubercular meningitis (1) ; tubercular peritonitis (1) ; cerebral tumour (1) ; measles and broncho-pneumonia (3) ; whooping cough and broncho-pneumonia (1).

The following are the principal complications which were noted :—

Otorrhœa . . . . .	150 cases or 8.4 per cent.
Nephritis . . . . .	19 „ 1.1 „
Arthritis and/or myofibrositis . . . . .	42 „ 2.4 „
Rhinitis (purulent) . . . . .	150 „ 8.4 „
Adenitis . . . . .	200 „ 11.3 „
Vaginitis . . . . .	12 „ 0.7 „

Sixty-six of the scarlet fever patients were suffering from one or more intercurrent infections, namely :—26 from measles, 12 from whooping-cough, 11 from dysentery, 10 from chickenpox, 4 from erysipelas, 1 from diphtheria, 1 from chickenpox and dysentery, and 1 from diphtheria and measles.

Table showing age and sex of scarlet fever patients :—

Age—Period in Years.		0-1 yrs.	1+ yrs.	2+ yrs.	3+ yrs.	4+ yrs.	5-9 yrs.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60- years.	Total.
Recovered	Males	4	31	54	78	83	314	130	43	51	19	3	1	...	811
	Females	...	18	54	76	100	374	130	46	93	38	16	8	1	954
Died	Males	...	2	1	3	...	1	...	...	...	1	...	...	...	8
	Females	...	2	1	1	...	1	...	...	1	...	...	...	...	6
Total		4	53	110	158	183	690	260	89	145	58	19	9	1	1779

Scarlet Fever fatality rate, 0·78 per cent.

There were 45 alleged “infecting cases” or 2·55 per cent. of the total number of scarlet fever convalescents discharged. Of the 45 alleged “infecting cases” 39 were “clean cases” whilst in hospital. The 45 “infecting cases” were responsible for 53 “return cases.” The return case rate was 3·0 per cent.

Anti-toxic serum was administered to 1049 patients (58·96 per cent.).

Tonsils and adenoids were removed in 142 cases or 8·00 per cent.

Mastoidectomy was performed in 44 cases or 2·47 per cent.

Relapse occurred in 14 cases or 0·79 per cent.

## MEASLES.

There were 557 cases admitted to the wards notified as suffering from measles. The diagnosis was confirmed in 517 patients. In addition there were 2 cases of measles misdiagnosed as rubella, 5 as diphtheria, 30 as scarlet fever and 1 as chickenpox—38 in all—bringing the measles total to 555. The corrected diagnosis in 40 patients erroneously notified as measles was as follows :—No disease (5), erythema (18), scarlet fever (4), rubella (1), otitis media or mastoid disease (5), bronchitis or pneumonia (4), naso-pharyngeal catarrh (2), chickenpox (1).

There were 47 deaths from measles of which 39 resulted from broncho-pneumonia as a complication.

Table showing age and sex of measles patients :—

Age-period in Years.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.
Recovered	Males	29	62	34	22	27	60	8	5	11	1	259
	Females	17	38	28	26	22	59	21	13	22	3	249
Died	Males	12	8	5	2	...	...	...	...	...	...	27
	Females	6	7	2	1	1	3	...	...	...	...	20
Total		64	115	69	51	50	122	29	18	33	4	555

Measles fatality rate 8·47 per cent.

## WHOOPIING-COUGH.

The number of cases admitted to the wards notified as suffering from whooping-cough was 48. The diagnosis was confirmed in 44 patients. Of the four erroneously diagnosed cases 2 were found to be suffering from catarrh, 1 from convulsions and 1 from bronchitis and otitis media.

There were 5 deaths, of which 3 (60·0 per cent.) were due to broncho-pneumonia.

Table showing age and sex of whooping-cough patients :—

Age-period in Years		0-1 years.	1-2 years.	2-3 years.	3-4 years.	4-5 years.	5-10 years.	Total.
Recovered	Males . . . . .	2	2	4	2	4	2	16
	Females . . . . .	1	3	7	5	1	6	23
Died	Males . . . . .	1	1	...	...	...	...	2
	Females . . . . .	1	2	...	...	...	...	3
Total . . . . .		5	8	11	7	5	8	44

Whooping-cough fatality rate, 11·36 per cent.

## PUERPERAL FEVER.

Of 168 cases notified as puerperal fever or puerperal pyrexia, the diagnosis of puerperal infection was confirmed in 153. In addition two puerperal fever cases were erroneously notified as suffering from scarlet fever, making a total of 155 cases of puerperal infection. Forty patients were admitted from districts outwith the City boundaries.

There were 25 deaths (16·1 per cent.)

Seventy-three patients were primiparæ and eighty-two multiparæ. Eight deaths (10·95 per cent.) occurred among the primiparæ and 17 (20·73 per cent.) among the multiparæ.

The corrected diagnosis in 15 cases was as follows :—Secondary anæmia (3) ; urinary infection (3) ; pulmonary tuberculosis (2) ; pneumonia (2) ; mammary abscess (2) ; cerebro-spinal meningitis (1) ; incomplete abortion (1) ; no disease (1).

The urinary tract was infected in 56 patients (36·15 per cent.) ; *B. coli* was the organism commonly found.

Table showing age of puerperal infection patients :—

Age-period in Years.		15-19 years.	20-29 years.	30-39 years.	40+ years.	Total.
Recovered	. . . . .	11	74	38	7	130
Died	. . . . .	2	10 (11·9%)	13 (25·5%)	...	25
Total	. . . . .	13	84	51	7	155

Puerperal Infection fatality rate, 16·1 per cent.

Fifty-five per cent. of the cases were admitted on or before the third day of illness. The average day of illness on which the patient first received treatment in hospital was the fourth.

*Streptococcus hæmolyticus* was isolated from the blood in 18 patients (11·61 per cent.) and from the uterus in 72 (46·45 per cent.).

### ENTERIC FEVER.

Seventeen cases were admitted to the hospital notified as suffering from enteric fever. The diagnosis was confirmed in 9 patients. One case notified as acute poliomyelitis was proved to be enteric fever—Para B.

The corrected diagnosis in 8 cases was as follows :—Gastro-enteritis (3) ; food poisoning (1) ; tumour of the spine (1) ; pleurisy with effusion (1) ; agranulocytosis (1) ; and pyelitis (1).

The infecting organism was the bacillus typhosus in 7 cases, and the bacillus paratyphosus B. in 3 cases.

No deaths occurred.

Table showing age and sex of enteric fever patients :—

Age—Period in Years.		0-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60+ years.	Total
Recovered	Males	...	...	1	1	...	1	...	1	...	4
	Females	...	2	...	...	1	1	2	...	...	6
Died	Males	...	...	...	...	...	...	...	...	...	...
	Females	...	...	...	...	...	...	...	...	...	...
Total		...	2	1	1	1	2	2	1	...	10

### ERYSIPELAS.

There were 236 cases admitted to the wards notified as suffering from erysipelas. The diagnosis was confirmed in 211 patients. The addition of one case erroneously diagnosed as chickenpox brings the total, including one country case, to 212.

The corrected diagnosis in the remaining 25 cases was as follows :—Cellulitis (9), erythema (3), dental abscess (3), abscess (2), urticaria (2), dacryocystitis (1), primary pneumonia (1), dermatitis venenata (1), furunculosis (1), herpes (1), and dry gangrene (1).

Twenty-one of the 212 cases of erysipelas died. Four deaths occurred in the non-erysipelatous group. The actual cause of death in two of the erysipelas patients was Parkinson's disease and carcinoma of the tongue respectively.



The inflammation primarily affected the face in 188 (88·67 per cent.) of the 212 cases. Twenty-one patients (9·90 per cent.) had suffered from a previous attack. One patient had had six prior attacks.

Table showing age and sex of erysipelas patients :—

Age—Period in Years.		0-4 years.	5-9 years	10-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60-69 years.	70+ years.	Total.
Recovered	Males .	14	2	6	6	16	18	15	15	4	96
	Females .	12	4	7	11	13	14	23	9	2	95
Died	Males .	4	...	...	...	...	1	1	5	3	14
	Females .	2	...	...	...	1	...	...	3	1	7
Total .		32	6	13	17	30	33	39	32	10	212

Erysipelas fatality rate, 9·90 per cent.

### CEREBRO-SPINAL MENINGITIS.

Thirty-seven suspected cases of cerebro-spinal fever were admitted to hospital, of which 25 proved to be meningococcal infections. In addition there were two cases misdiagnosed as diphtheria, and one as puerperal fever, making a total of 28.

The following diseases were noted in the group of 11 misdiagnosed cases :—Tubercular meningitis (1) ; streptococcal meningitis (1) ; epidemic encephalitis (1) ; catarrh and meningism (1) ; streptococcal septicæmia (2) ; lobar pneumonia (1) ; acute nephritis and uræmia (1) ; diphtheria (1) ; ulcerative angina (1) ; intestinal toxæmia (1).

Eighteen cases of meningococcal meningitis died.

The fatality rate for all ages was 64·2 per cent. ; excluding infants 60·0 per cent. ; under one year 75·0 per cent.

Table showing age and sex of patients suffering from cerebro-spinal meningitis :—

Age—Period in Years.		Under 1 year.	1-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50+ years.	Total.
Recovered	Males .	1	3	1	1	1	1	...	...	...	8
	Females .	1	...	...	...	...	...	...	...	1	2
Died	Males .	5	3	1	1	...	2	...	...	...	12
	Females .	1	2	...	...	...	2	...	...	1	6
Total .		8	8	2	2	1	5	...	...	2	28

Cerebro-spinal meningitis fatality rate, 64·2 per cent.

### BACILLARY DYSENTERY.

Forty-nine cases were admitted to the wards notified as dysentery. The diagnosis was confirmed in 44. Various strains of *B. dysenteriæ* Flexner were isolated from 16 cases and *B. dysenteriæ* Sonne from 16. There was one death from a Flexner infection.

Table showing age and sex of bacillary dysentery patients :—

Age-period in Years.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.
Recovered	Males .	1	5	3	5	4	4	2	...	1	2	27
	Females .	3	...	2	2	1	6	2	...	...	...	16
Died	Males .	...	...	...	...	...	...	...	...	...	...	...
	Females .	...	...	1	...	...	...	...	...	...	...	1
Total .		4	5	6	7	5	10	4	...	1	2	44

Bacillary Dysentery fatality rate, 2.27 per cent.

### EPIDEMIC PAROTITIS.

Seventy-three cases were admitted to hospital notified as suffering from mumps. The diagnosis was confirmed in 69 patients. In addition there was one case erroneously diagnosed as suffering from scarlet fever, making a total of 70 patients. There were no deaths.

Table showing age and sex of epidemic parotitis patients :—

Age-period in Years.					3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.				
Recovered	{	Males	.	.	.	.	...	1	17	12	1	4	2	57		
		Females	.	.	.	.	2	3	5	11	5	6	1	33		
Died	{	Males	.	.	.	.	...	...	...	...	...	...	...	...		
		Females	.	.	.	.	...	...	...	...	...	...	...	...		
Total					.	.	.	.	2	4	22	23	6	10	3	70

### OTHER DISEASES.

**Chickenpox.**—Sixty-four cases were admitted to the wards notified as suffering from chickenpox. The diagnosis was confirmed in 63 patients. In addition there were two cases of chickenpox admitted to hospital erroneously diagnosed as rubella and measles respectively, thus bringing the chickenpox total to 65 cases. No deaths occurred.

**Rubella.**—The diagnosis was confirmed in one out of 7 patients admitted to hospital alleged to be suffering from rubella. In addition there was one case of rubella notified as measles, making a total of 2 cases of rubella. Both patients recovered.

**Epidemic Encephalitis.**—One case regarded as suffering from cerebro-spinal meningitis prior to admission proved to be genuine epidemic encephalitis—the patient died.

**Pneumonia.**—Thirteen patients were admitted to the wards notified as suffering from either primary pneumonia or influenzal broncho-pneumonia. The diagnosis was confirmed in 4 cases. In addition there were 8 cases of pneumonia erroneously diagnosed as scarlet fever, 2 as puerperal fever, 1 as diphtheria, 1 as cerebro-spinal meningitis, and 1 as measles, making a total of 17. Four pneumonia cases died, a fatality rate of 23·53 per cent.

**Acute Poliomyelitis.**—One case notified as acute poliomyelitis was proved to be suffering from enteric fever—*B. paratyphosus* B. infection.

**Infective Jaundice.**—One case notified as acute infective jaundice proved to be obstructive jaundice, and was transferred to the Western General Hospital for operative treatment.

### LABORATORY ANNUAL REPORT.

Nine post-mortems were performed and seven vaccines made.

Nature of Specimen.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
Throat swabs for <i>B. diphtheriæ</i> . . . . .	249	309	294	253	254	280	253	254	319	284	278	323	3350
Throat swabs for <i>S. Hæmolyticus</i> . . . . .	77	87	96	79	74	75	74	79	88	135	112	88	1064
Sputum for Tubercle Bac. . . . .	91	133	92	108	104	93	114	105	103	121	157	141	1362
Cerebro-spinal Fluids . . . . .	19	64	58	31	24	2	3	21	9	21	12	26	290
Urines . . . . .	62	48	54	43	29	37	41	35	32	34	32	18	465
Stools . . . . .	5	19	24	38	18	17	6	16	10	7	52	12	224
Blood for Widal's React. . . . .	1	3	...	...	2	2	1	3	...	3	2	2	19
Blood Cultures (each examined thrice) . . . . .	19	24	28	21	34	33	16	10	8	10	14	11	228
Uterine swabs for <i>S. Hæmolyticus</i> . . . . .	19	23	22	11	19	17	20	12	14	11	25	11	204
General . . . . .	5	7	16	10	12	17	12	14	4	10	9	1	117
Monthly Total . . . . .	547	717	684	594	570	573	540	549	587	636	693	633	7323

# BACTERIOLOGICAL SERVICES.

## REPORT BY DIRECTOR OF BACTERIOLOGICAL SERVICES.

The following is a report of the work carried out for the City by the Bacteriology Department of Edinburgh University from January to December, 1934.

### ROUTINE BACTERIOLOGICAL EXAMINATIONS

(including examinations for Municipal Hospitals).

	Jan	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Swabs and cultures from throat, nose and ear for examination for <i>B. diphtheriæ</i> :—													
Total . . . . .	635	523	522	393	503	331	447	267	438	451	390	432	5332
Positive . . . . .	109	98	83	73	87	53	102	47	67	77	77	85	958
Negative . . . . .	526	425	439	320	416	278	345	220	371	374	313	347	4374
<i>B. diphtheriæ</i> Virulence tests :—													
Total . . . . .	39	35	38	26	17	15	14	14	37	22	32	38	327
Positive . . . . .	18	11	4	14	8	6	5	8	17	12	15	26	144
Negative . . . . .	21	24	34	12	9	9	9	6	20	10	17	12	183
Throat, nose and ear swabs for general bacteriological examination :—													
Total . . . . .	114	81	100	56	68	54	57	54	80	60	45	66	835
Positive-Hæmolytic Streptococci . . . . .	43	45	41	12	30	29	30	32	51	34	28	30	405
Positive-organisms of Vincent's Infection . . . . .	4	5	3	1	2	2	1	...	...	3	2	...	23
Sputum for <i>B. tuberculosis</i> :—													
Total . . . . .	195	150	153	142	157	117	95	89	86	130	163	128	1605
Positive . . . . .	58	16	20	18	25	17	21	3	14	20	23	14	249
Negative . . . . .	137	134	133	124	132	100	74	86	72	110	140	114	1356
Urine for <i>B. tuberculosis</i> :—													
Total . . . . .	14	21	9	17	6	...	...	...	1	2	1	4	75
Positive . . . . .	3	6	1	5	2	...	...	...	...	...	...	...	17
Negative . . . . .	11	15	8	12	4	...	...	...	1	2	1	4	58
Fæces and urine for organisms of enteric fever, dysentery or food poisoning :—													
Total . . . . .	7	10	13	35	14	12	9	30	8	10	34	37	219
Pos.- <i>B. typh.</i> . . . . .	...	...	...	...	...	...	...	...	...	...	...	1	1
Pos.- <i>B. para B.</i> . . . . .	1	...	...	...	...	...	...	...	...	...	...	...	1
Pos.- <i>B. dys. Flexner</i> . . . . .	...	3	...	4	...	2	...	...	...	...	...	...	9
Pos.- <i>B. dys. Sonne</i> . . . . .	...	...	...	1	...	...	...	1	1	...	8	7	18
Blood for Widal reaction* :—													
Total . . . . .	2	6	11	5	9	6	3	2	3	5	5	6	63
Pos.- <i>B. typh.</i> . . . . .	...	...	...	...	...	1	...	...	...	...	...	...	1
Pos.- <i>B. para B.</i> . . . . .	...	1	...	...	1	...	...	...	...	...	1	...	3
(Pos.- <i>Br. abortus</i> ) . . . . .	...	...	1	1	1	...	...	1	...	...	...	...	4
Negative . . . . .	2	5	10	4	7	6	2	1	3	5	4	6	55
Blood for Wassermann reaction :—													
Total . . . . .	70	47	44	44	75	43	37	31	34	48	47	33	553
Positive . . . . .	9	8	7	12	4	5	3	4	12	8	5	2	79
Negative . . . . .	61	39	37	32	71	38	34	27	22	40	42	31	474
Blood for Syphilis Flocculation Test :—													
Total . . . . .	64	48	35	42	72	45	41	32	34	46	45	34	538
Positive . . . . .	14	9	3	13	13	6	6	3	16	5	3	6	97
Negative . . . . .	50	39	32	29	59	39	35	29	18	41	42	28	441
Water specimens for Bacteriological Examination . . . . .	7	7	7	7	6	7	7	15	7	7	2	7	86

\* Some of these were repeat examinations from the same patient.



NATURE OF SPECIMEN.	EXAMINATION REQUESTED.	TOTAL.
Sputum . . . . .	General Examination . . . . .	30
Sputum . . . . .	For Type of Pneumococcus . . . . .	4
Sputum . . . . .	For B. Pertussis . . . . .	1
Sputum . . . . .	For B. Influenzæ . . . . .	1
Blood . . . . .	For Malaria Parasites . . . . .	3
Blood . . . . .	General Cultural Examination . . . . .	61
Blood . . . . .	For Culture of Br. Abortus . . . . .	14 (3 pos.)
Blood . . . . .	For Leptospira Icterohæmorrhagiæ . . . . .	1
Urine . . . . .	General Examination . . . . .	279
Urine . . . . .	For Schistosoma Hæmatobium . . . . .	1
Urine . . . . .	For Leptospira Icterohæmorrhagiæ . . . . .	1
Urine . . . . .	For Gonococcus . . . . .	2
Urine . . . . .	For Streptococcus . . . . .	4
Fæces . . . . .	For Amœbæ, Parasites and Pathogenic Bacteria . . . . .	7
Fæces . . . . .	For B. Tuberculosis . . . . .	5
Pus . . . . .	General Examination . . . . .	101
Pus . . . . .	For B. Tuberculosis . . . . .	8 (2 pos.)
Cerebro-spinal Fluid . . . . .	For Cells, Protein, Globulin and Colloidal Gold test . . . . .	86
Cerebro-spinal Fluid . . . . .	General Examination . . . . .	11
Cerebro-spinal Fluid . . . . .	For B. Tuberculosis . . . . .	6 (2 pos.)
Cerebro-spinal Fluid . . . . .	For Hæmolytic Streptococci . . . . .	1 (1 pos.)
Cerebro-spinal Fluid . . . . .	For Typing of Meningococcus . . . . .	2
Cerebro-spinal Fluid . . . . .	For Wassermann Reaction . . . . .	71 (13 pos.)
Vaginal, Cervical and Urethral Smears and Swabs . . . . .	For Gonococcus . . . . .	48 (14 pos.)
Vaginal, Cervical and Urethral Smears and Swabs . . . . .	General Examination . . . . .	19
Conjunctival Smears . . . . .	General Examination . . . . .	3
Conjunctival Smears . . . . .	For Gonococcus . . . . .	11 (2 pos.)
Pleural and Peritoneal Fluid . . . . .	General Examination . . . . .	31
Pleural and Peritoneal Fluid . . . . .	For B. Tuberculosis . . . . .	20 (1 pos.)
Tissues . . . . .	For B. Tuberculosis . . . . .	4
Tissues . . . . .	For Typing of B. Tuberculosis . . . . .	2
Tissues . . . . .	General Examination . . . . .	3
Stomach Washings . . . . .	For B. Tuberculosis . . . . .	12 (1 pos.)
Hair . . . . .	For Ringworm Fungus . . . . .	2 (1 pos.)
Diphtheria Prophylactic . . . . .	Sterility Test . . . . .	4
Autogenous Vaccines prepared . . . . .	. . . . .	14
*Rats Examined for Plague Infection . . . . .	. . . . .	38
		—
		911
	TOTAL	10,544

\* These were carcasses of rats caught in docks or on board ships arriving from foreign ports and were examined as a precautionary measure. All were negative.

## EXAMINATIONS FOR MUNICIPAL HOSPITALS.

### Bangour Mental Hospital.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for B. diphtheriæ . . . . .	17	0	17
Throat, nose and ear swabs for general bacteriological examination . . . . .	1	...	...
Blood for Wassermann Reaction . . . . .	82	10	72
Blood for Flocculation Test for Syphilis . . . . .	84	15	69
Cerebro-spinal fluid for Wassermann Reaction . . . . .	5	2	3
Cerebro-spinal fluid for Cells, Protein, Globulin and Colloidal Gold test . . . . .	5	...	...
Cerebro-spinal fluid for B. tuberculosis . . . . .	1	...	1
Pus for B. tuberculosis . . . . .	1	...	1
Pus for general bacteriological examination . . . . .	2	...	...
	198		

## Gogarburn Certified Institution.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	29	5	24
Throat, nose and ear swabs for general bacteriological examination	6	...	...
Urine for general bacteriological examination	4	...	...
	<u>39</u>		

## Royal Victoria Dispensary.

	Total.	Positive.	Negative.
Sputum for <i>B. tuberculosis</i>	888	125	763
Blood for Wassermann Reaction	6	...	6
Blood for Flocculation Test for Syphilis	5	...	5
Pus for general bacteriological examination	2	...	...
Throat swab for general bacteriological examination	1	...	...
	<u>902</u>		

## Western General Hospital.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	232	74	158
Throat, nose and ear swabs for <i>B. diphtheriæ</i> Virulence test	49	17	32
Throat swabs for general bacteriological examination	126	...	...
Sputum for <i>B. tuberculosis</i>	32	7	25
Sputum for general bacteriological examination	2	...	...
Sputum for typing of <i>Pneumococcus</i>	2	...	...
Blood for Wassermann reaction	408	57	351
Blood for Flocculation test for Syphilis	392	69	323
Blood for Widal examination	13	*1	12
Blood for Malaria Parasites	2	...	2
Blood for culture	24	...	...
Cerebro-spinal fluid for Wassermann Reaction	47	8	39
Cerebro-spinal fluid for Cells, Protein, Globulin and Colloidal Gold tests	52	...	...
Cerebro-spinal fluid for general bacteriological examination	5	...	...
Pleural, Peritoneal and other Fluids for general bacteriological examination	22	...	...
Pleural fluid for <i>B. tuberculosis</i>	5	1	4
Pus for general bacteriological examination	71	...	...
Pus for <i>B. tuberculosis</i>	3	...	3
Fæces and urine for organisms of enteric and dysentery groups	99	16	83
Fæces for general bacteriological examination	5	...	...
Fæces for <i>B. tuberculosis</i>	3	...	...
Urine for general bacteriological examination	233	...	...
Urine for <i>Schistosoma hæmatobium</i>	1	0	1
Vaginal, cervical and urethral smears for <i>Gonococcus</i>	19	3	16
Vaginal, cervical and urethral smears for general bacteriological examination	2	...	...
Conjunctival smears for <i>Gonococcus</i>	7	...	7
Stomach washings for <i>B. tuberculosis</i>	9	...	9
Hair for ringworm fungus	2	1	1
Tissues for general bacteriological examinations	4	...	...
Autogenous vaccines prepared	8	...	...

\*Paratyphus B.

1,879

## Eastern General Hospital.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	9	...	9
Throat nose and ear swabs for general bacteriological examination	3	...	...
Blood for Wassermann reaction	9	3	6
Blood for Flocculation test for Syphilis	9	1	8
Blood culture	4	...	...
Cerebro-spinal fluid for general bacteriological examination	1	...	...
Cerebro-spinal fluid for Wassermann reaction	16	2	14
Cerebro-spinal fluid for Cells, Protein, Globulin and Colloidal Gold test	20	...	...
Sputum for <i>B. tuberculosis</i>	2	1	1
Sputum for general bacteriological examination	1	...	...
Fæces and urine for organisms of enteric and dysentery groups	3	...	3
Urine for general bacteriological examination	1	...	...
Urine for <i>B. tuberculosis</i>	1	...	1
Vaginal, cervical and urethral smears for <i>Gonococcus</i>	4	...	4
Pus for general bacteriological examination	1	...	...
Pleural fluid for general bacteriological examination	2	...	...
Lung tissue for <i>B. tuberculosis</i>	3	...	3

89

## Northern General Hospital.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i> . . . . .	9	...	9
Throat, nose and ear swabs for general bacteriological examination . . . . .	4	...	...
Blood for Wassermann reaction . . . . .	9	5	4
Blood for Flocculation test for Syphilis . . . . .	17	9	8
Blood for Widal reaction . . . . .	2	...	2
Sputum for <i>B. tuberculosis</i> . . . . .	1	...	1
Sputum for general bacteriological examination . . . . .	2	...	...
Cerebro-spinal fluid for general bacteriological examination . . . . .	2	...	...
Cerebro-spinal fluid for Cells, Protein, Globulin and Colloidal Gold Test . . . . .	1	...	...
Blood culture . . . . .	3	...	...
Fæces and urine for general bacteriological examination . . . . .	6	...	...
Pus for general bacteriological examination . . . . .	6	...	...
Pleural fluid for general bacteriological examination . . . . .	2	...	...
Hair for ringworm . . . . .	1	...	1
	<u>65</u>		

## City Hospital for Infectious Diseases.

	Total.	Positive.	Negative.
Throat, nose and ear swabs and cultures for <i>B. diphtheriæ</i> . . . . .	581	268	313
<i>B. diphtheriæ</i> cultures for Virulence test . . . . .	236	104	132
Throat swabs for Hæmolytic Streptococci . . . . .	44	18	26
Throat swabs for organisms of Vincent's infection . . . . .	1	1	...
Throat swabs for general examination . . . . .	2	...	...
Sputum for <i>B. tuberculosis</i> . . . . .	46	37	9
Sputum for general bacteriological examination . . . . .	2	...	...
Blood for Wassermann reaction . . . . .	18	3	15
Blood for Flocculation test for Syphilis . . . . .	23	7	16
Blood for Widal reaction . . . . .	9	1	8
Fæces and urine for organisms of enteric and dysentery groups . . . . .	81	14	67
Cerebro-spinal fluid for Wassermann reaction . . . . .	2	1	1
Cerebro-spinal fluid for Cells, Protein, Globulin and Colloidal Gold test . . . . .	7	...	...
Cerebro-spinal fluid for general examination . . . . .	8	...	...
Cerebro-spinal fluid for <i>B. tuberculosis</i> . . . . .	2	...	...
Blood for culture . . . . .	21	...	...
Pleural, peritoneal and other fluids for general examination . . . . .	9	...	...
Pleural, peritoneal and other fluids for <i>B. tuberculosis</i> . . . . .	7	...	7
Vaginal, cervical and urethral smears for general bacteriological examination . . . . .	14	...	...
Urine for <i>B. tuberculosis</i> . . . . .	3	...	...
Urine for general bacteriological examination . . . . .	4	...	...
Pus for general bacteriological examination . . . . .	5	...	...
Diphtheria Prophylactic for Sterility test . . . . .	4	...	...
Autogenous vaccine prepared . . . . .	1	...	...
	<u>1,130</u>		

Total Examinations for Municipal Hospitals . . . . . 4,302

## NOTES ON CERTAIN OBSERVATIONS MADE IN THE COURSE OF ROUTINE EXAMINATIONS.

During the year the practice was instituted of culturing in 5 c.c. of sterile ox bile the clot from all samples of blood received for the Widal reaction.

In four cases organisms of the enteric or food-poisoning group were isolated in this way from blood samples that gave a negative Widal reaction. Thus the cultural method enabled the ætiology of the patient's illness to be discovered where a Widal reaction alone would not have done so. The organisms isolated were *B. typhosus*, *B. paratyphosus B.*, *Salmonella Aertrycke* and a *Salmonella* organism of the "Newport" type (the two latter being organisms generally associated with bacterial "food-poisoning"). The culture of the last organism was of special interest as the patient showed

none of the signs and symptoms usually associated with infection by organisms of the food-poisoning group. There was present a low grade intermittent fever which gave rise to a suspicion that the disease might be undulant fever and for this reason an agglutination test for *Br. abortus* was requested. This was, however, negative.

Other organisms of the *Salmonella* group were cultured from various sources. From the cerebro-spinal fluid of an infant suffering from meningitis, there was isolated, on two occasions, the so-called "Dublin" type. This organism was also found to be present in the patient's blood. Blood culture in one instance yielded a growth of *Salmonella* "Newport," and from the fæces of three patients there were isolated *Salmonella Aertrycke*, *Salmonella Gaertner* and *Salmonella* "Potsdam." The last organism has only twice previously been found in Great Britain.

On nine occasions *B. dysenteriae* Flexner was cultured from fæces and on eighteen, *B. dysenteriae* Sonne. These organisms were obtained from children or nurses in attendance on them. The strains of *B. dysenteriae* Sonne, as a rule, proved inagglutinable by the appropriate antisera until they had been frequently sub-cultured. For the most part they became agglutinable after six sub-cultures, but some strains required even further sub-culture. Only after prolonged incubation did they ferment lactose or saccharose; the fermentation of these sugars has been regarded as a characteristic property of this type of organism.

*B. fæcalis alcaligenes* was frequently found in the blood of patients suffering from conditions clinically of a septicæmic type. By culture of blood clot it was obtained three times and in blood culture taken in broth it was obtained nine times. This organism was described by its original discoverer as being capable of giving rise to a disease of enteric type. Since then it has been found on numerous occasions in the blood of patients suffering from febrile illness. Its specific ætiological role in these conditions is, however, doubtful. It is possible that it may not itself have any primary pathogenic action but may invade the blood stream of a patient whose resistance is lowered by other causes.

**Undulant Fever.**—All blood samples submitted for the Widal reaction have as a routine procedure, been examined for *Br. abortus* agglutinins as well as for agglutinins for *B. typhosus* and *B. paratyphosus* A and B.

During the year two cases of undulant fever in the City of Edinburgh were discovered by this means. One was a patient admitted to a hospital in the city from a neighbouring county. The illness of one patient was short, lasting for four weeks, and there were no relapses or complications. In this case the most pronounced feature was profuse sweating at night; slight headache and backache were present and appetite was poor. The other patient's illness began with gastro-intestinal upset characterised by abdominal pain, vomiting and diarrhœa. Later she became jaundiced. There was no night sweating, but her temperature was high at night, and on several occasions she had rigors followed by sweating during the day. Headache and backache were pronounced. In this case there were several relapses and the total duration of illness was about fourteen weeks.



In 1932 it was shown that 34·9 per cent. of retail samples of raw milk sold in Edinburgh contained *Br. abortus*. About 60 per cent. of the milk sold in Edinburgh is pasteurised and *Br. abortus* thereby killed. But the remaining 40 per cent., a third of which, presumably, contains *Br. abortus*, should provide ample opportunity for infection. There would appear to be two possible factors determining why so few of those at risk contract undulant fever. It may be that a large dose of the infecting organism is necessary to produce the disease. In support of this is the fact that a high proportion of the 97 cases of undulant fever known to have occurred in Scotland since 1929 have been among heavy consumers of raw milk. On the other hand many cases occur among those who take little milk.

The other possible factor is that the bulk of the population possess an immunity, natural or acquired, to infection with *Br. abortus*. It may be only the occasional person with a low degree of resistance who contracts the disease. Probably both factors are operative.

(C. P. Beattie.)

## SPECIAL INVESTIGATIONS.

### TYPES OF THE DIPHTHERIA BACILLUS.

The occurrence and clinical correlation of the different biological types of the diphtheria bacillus found in cases in Edinburgh have been continuously studied in recent years, since it was pointed out that a given type designated "*gravis*" is associated with a severe clinical form of the disease in certain parts of England. This enquiry was begun in 1932 in collaboration with Dr. Rankin of the City Fever Hospital and has been continued in co-operation with Drs. Cuthbert and Pearson of the same hospital.

The "*intermediate*" type of *B. diphtheriæ*, as in previous years, still predominates and it is particularly interesting to note that the prevalence of atypical forms recorded in 1933 has been followed by a marked increase in strains characterised by a "*gravis*" form of colony, but which fail to ferment starch (the fermentation of this carbohydrate being characteristic of the "*gravis*" type), and are avirulent by the usual methods of testing in laboratory animals. This type of organism has been isolated not infrequently during the last months of 1934. Latterly, however, a considerable number of these have shown a positive reaction when tested for virulence and thus approximate more to the "*gravis*" type. Such strains were practically unknown in Edinburgh two years ago.

As we have already suggested, an increase in the number of "*gravis*" strains may indicate a changing type of the infection. During 1934, however, the prevalent clinical type of diphtheria in Edinburgh remained mild.

(M. H. Christison and H. A. Wright.)

## A FATAL CASE OF MENINGEAL INFECTION WITH A DIPHTHEROID BACILLUS.

In November, 1934, a fatal case of meningitis due to infection with an unusual bacillus of the diphtheroid group occurred in Edinburgh. Microscopic examination of the meningeal pus revealed a large number of small Gram-positive bacilli, many being situated intracellularly in the pus cells of the exudate. The cellular reaction resembled in many respects that found in tuberculous meningitis, being of mixed type. Polymorphonuclear cells were present but were in a minority as compared with lymphocytes and large mononuclears. The duration of illness was 6 days, with symptoms similar to those of acute meningitis due to other causes.

The organism was readily isolated and it was found to differ in many respects from any previously described member of the diphtheroid group. It was small in size and lacked the metachromatic granules characteristic of *B. diphtheriæ*. Its cultural and biochemical reactions differentiated it from any related organism known to be pathogenic for man.

Pathogenicity for animals was a marked feature, infection of rabbits, guinea-pigs, rats and mice proving fatal in 3-12 days. The characteristic lesion was a small tubercle-like focus in which the organisms were numerous. Such foci were found in the liver, kidney, spleen, and to a less extent in the lung. A septicæmia could usually be demonstrated at autopsy. No tendency to localisation in the meninges of any animal was observed, but inoculation of pure cultures intracerebrally into rabbits reproduced an acute purulent leptomeningitis, as seen in the human case. The wide dissemination of the organism in animals contrasts with the state of affairs seen after inoculation with *B. diphtheriæ* when toxin production from organisms localised at the site of inoculation causes death. No evidence of toxin production could be obtained after exhaustive studies with many media.

The invasive character of the organism recalled the Preisz-Nocard bacillus (*C. ovis*) which causes a tubercle-like infection by invading the lymphatic system of sheep. On close comparison, however, the two types could be readily differentiated.

Barratt (1933) has recently described a number of strains of diphtheroid bacilli, pathogenic for animals, which she has isolated from the naso-pharynx of human cases of throat infection and also from normal individuals. Such strains resemble in some respects the strain isolated from the present case.

Meningitis resulting from diphtheroid infection is rare, and, indeed, only one previous case has been found in which the ætiological role of a diphtheroid bacillus was established. This case occurred in America in 1933, and it is described by Schultz et al. (1934).

### REFERENCES :—

- Barratt, M.M. (1933). *J. Path. Bact.*, vol. 36, p. 369.  
Schultz, E. W. et al. (1934). *Proc. Soc. Exp. Biol. Med.*, vol. 31, p. 1021.

## SEROLOGICAL EXAMINATION OF SCARLATINAL STREPTOCOCCI.

The examination of strains of hæmolytic streptococci isolated from cases of scarletina during the epidemic in 1933 has now been completed ; 1875 throat swabs were taken from cases in the acute stage of illness, and of these 84·3 per cent. were found to yield hæmolytic streptococci, while 15·7 per cent. were negative ; 1488 of the 1581 strains isolated were separable into eight serological types of which four were identical with Griffith's types I., II., III. and IV., while four further types have been provisionally named A, B, C and D. The numbers of acute cases grouped according to serological type were as follows :—

Type A.	Type B.	Type C.	Type D.	Type I.	Type II.	Type III.	Type IV.	Total Strains Typed.	Total Strains Untyped.
756	72	85	33	117	92	248	85	1488	93
47·8%	4·6%	5·8%	2·1%	7·4%	5·8%	15·7%	5·4%	94·1%	5·9%

The proportion of cases due to the above types was not constant from month to month during the epidemic. The most striking variation was that of Type A. At the beginning of the epidemic the proportion of cases due to this type was 43 per cent. In June, 1933, during the height of the epidemic, the proportion had risen to 78 per cent., and in October, with the decline in case incidence, the proportion fell to 20 per cent. Thus an important factor in the epidemic was the widespread distribution of Type A. Strains of this type were not found to differ to any appreciable extent from those of other types as regards power of toxin production and virulence.

On discharge, throat swabs were taken from 1062 patients ; 58·9 per cent. of these swabs yielded a growth of hæmolytic streptococci, while 31·3 per cent. yielded hæmolytic streptococci of the same type as that present in the throat on admission ; 4 per cent. of these cases were found to have at least one additional type of streptococcus in the throat on discharge, and 6·4 per cent. had types entirely distinct from those present on admission. Strains thus isolated from patients on discharge were on the whole less active toxin producers, but some strains were as potent in this respect as those isolated in the acute phase of illness. Since these patients were swabbed only when the throat appeared to be clinically "clean," it would appear that a proportion of cases at least become carriers of fully virulent organisms without having any recognisable clinical lesion.

(C. A. Green.)

## THE STREPTOCOCCI OF BOVINE MASTITIS.

The transmission of streptococcal infection from animals to man by cow's milk has always interested epidemiologists. The recent exhaustive studies of Professor Minett and his co-workers at the Royal Veterinary College, London, have shown that in certain cases of bovine mastitis, strains of streptococci occur which are of high virulence for laboratory animals and are in all respects similar to *Streptococcus pyogenes* of man. The animal infection in such cases has probably arisen from a human source. The presence of such strains in milk would account for epidemics of sore throat.

The majority of strains from mastitis have been named *Streptococcus agalactiæ* and an exhaustive classification of such strains on morphological, cultural and serological grounds has been carried out by the London workers.



The veterinary bacteriologists mentioned, utilised various criteria of identity which are unfamiliar to medical bacteriologists. Thus *Streptococcus agalactiae* was stated to be of cultural type *alpha*, *beta* or *gamma* on blood-agar, differentiation on this medium being almost ignored in classification. This contrasts sharply with medical practice where the differentiation of streptococci into *viridans*, *haemolytic* and *inert* types (*alpha*, *beta* and *gamma*, respectively) is regarded as of the first importance.

That the purely bovine streptococci may be of interest in preventive medicine was shown by Hare and Colebrook (1934), who examined strains from the genital tract of febrile and afebrile parturient women and found that a proportion of those strains of haemolytic streptococci which appeared to have no invasive power, presented some of the characters of the bovine type.

During 1934 a study was made of 51 strains of streptococcus isolated from 51 cases of bovine mastitis. Parallel tests were made in which the differential method employed by both veterinary and medical workers were investigated, streptococci of human origin being simultaneously tested for purposes of comparison.

It was found that the bovine strains showed the utmost lack of uniformity, and indeed, on a basis of a relatively few cultural and biochemical tests 51 groups might have been proposed for the 51 strains. In a general way the strains were quite atypical of those met with in human disease. *Haemolytic*, *viridans* and *inert* groups could be differentiated, but the associated characteristics were not usually those found in human strains of those groups. The work emphasised that the utmost caution must be exercised before an isolated strain recovered from a case of human infection is labelled bovine. The suggested value of fermentation tests with sorbite and trehalose as almost specific means of differentiating human from bovine streptococci could not be confirmed.

REFERENCE :—

Hare, R., and Colebrook, L. (1934). *J. Path. Bact.*, vol. 39, p. 429.

(H. J. Gibson and R. O. Muir.)

## A BACTERIOLOGICAL INVESTIGATION OF CASES OF TUBERCULOUS MENINGITIS.

An investigation initiated in 1933 by Dr. H. J. Kirkpatrick in collaboration with Dr. Agnes Macgregor and Dr. W. S. Craig of the Royal Hospital for Sick Children has been continued. As indicated in the Annual Report for 1933, the cerebro-spinal fluids from 35 cases clinically diagnosed as tuberculous meningitis were found to contain tubercle bacilli, in 26 patients the organism being of the human type and in 9 of the bovine type. Since then a further series of 18 similar cases have been fully investigated and of these 12 were due to infection with the human type and from 6 the bovine type of bacillus was isolated. The proportion of cases due to human and bovine strains respectively is as follows :—

Year.	No. of Cases.	Type of Tubercle Bacillus.	
		Human.	Bovine.
1933	35	26	9
1934	18	12	6
Total	53	38 (71·7%)	15 (28·3%)



These data are of interest in illustrating the part played by the bovine type of tubercle bacillus in the production of lesions in the central nervous system. Griffith has found in England a similar incidence of the bovine type in tuberculous meningitis : 30.1 per cent. for all ages, the proportion being slightly higher (34.8 per cent.) in the age group 0-4 years. This also applied to the Edinburgh series, the percentage in the bovine group being 34.3. It may be noted that the great majority of cases were children under 14 years of age. A similar incidence of the bovine type of tubercle bacillus in meningitis has been recorded in Germany.

These bacteriological investigations have been closely correlated with clinical and pathological study of the cases dealt with and certain important data have been elicited. Thus tubercle bacilli have been found in the cerebro-spinal fluid in the absence of diffuse meningitis. Meningitis has usually been the result of infection from a pre-existing focus in the central nervous system. The evidence available also points to the fact that limited tuberculous infections may occur in the central nervous system from which apparent clinical recovery, at least temporarily, takes place.

(C. A. Green.)

## THE CAPSULATED GRAM-NEGATIVE BACILLI OF THE RESPIRATORY AND INTESTINAL TRACTS.

Capsulated Gram-negative bacilli characterised by a mucoid type of growth occur as common inhabitants of the upper respiratory passages and of the intestinal tract, and these organisms play a not unimportant part as pathogens in the former region, e.g., the pneumobacillus of Friedlander. Such bacteria may also occur in water and milk, e.g., *B. lactis aerogenes*, and are of considerable interest as organisms encountered in public health bacteriological work. The question of the relationship of strains from different sources is of special importance. This has been carefully studied by comparison of a considerable number of strains as regards their various biological characters (including biochemical properties), serological reactions and experimental pathogenicity. The results have elicited the fact that strains isolated from sputum cannot be differentiated by any common characters from those derived from the intestine and other sources, and irrespective of their habitat and occurrence these organisms must be regarded as forming a closely related group of commensal (or saprophytic) and potentially pathogenic bacteria.

(A. C. Stirling.)

## ACTINOMYCOSIS.

An investigation into the *Actinomyces* group of organisms is being carried out, both from a morphological and cultural point of view and also to study the factors necessary to establish clinical infection.

In Edinburgh, as elsewhere, frank cases of actinomycosis are comparatively rare. The Registrar-General's returns for England and Wales for the years 1921-1931, show an average annual mortality of only 46 from this disease ; and Cope (Proceedings of the Royal Society of Medicine, vol. xxiii., p. 867, 1930) found the case incidence in the London Hospitals (exclusive of those where special work on actinomycosis was

being carried out), averaged 1-2·7 per annum for each hospital. He also noted that the recorded incidence in the Glasgow and Edinburgh Infirmaries is considerably less, and personal search amongst the case records of the Royal Infirmary, Edinburgh, has revealed only eight cases diagnosed as actinomycosis during 1924-32.

One suspects, however, that these figures are not a true index of the extent of infection with organisms of the *Actinomyces* group. During the eighteen months in which this investigation has been in progress, and with but limited opportunity for obtaining material from typical cases, seven undoubted cases of *Actinomyces* infection have come to notice (6 cervico-facial; 1 apparently a primary infection in the lumbar spine and later becoming generalised.) Where material from these cases was procured by surgical incision, a pure growth of the organism was obtained in primary culture. Three of these strains are of the micro-ærophilic type of Wolff and Israel, the others being aerobic.

Organisms of this group have been met with in material from another type of case where the infection is mixed, and where the ætiological significance of the *Actinomyces* is doubtful. Clinically these were not cases of actinomycosis, the diagnosis being, e.g., "bronchiectasis," "appendicitis," "subphrenic abscess," "osteomyelitis of the malar bone," etc. Strains of *Actinomyces* (all aerobic) have been isolated from eight such cases; but there have been several others where, probably owing to the very mixed nature of the infection, isolation has failed.

The cultural and biological characters of these strains are under investigation, but their ætiological relationship is difficult to establish as the virulence of these organisms for laboratory animals is very low. With only one of the strains isolated (an aerobic strain from a cervico-facial case) has rapid and generalised infection been produced. Previous workers on this subject have obtained similar negative results in animal experiments. The mode of infection in the disease has not been demonstrated; evidence is accumulating that actinomyces are present in the mouth of healthy persons, and one or more concomitant factors appear to be necessary for the establishment of both natural and experimental infection. In view of the serious nature of even the localised lesions, the marked chronicity of the disease and the high rate of fatality of abdominal and thoracic cases, the further elucidation of this infection is of practical importance.

(H. A. Wright.)

## THE DIAGNOSIS OF MALARIA BY A SERUM REACTION.

Further work has been carried out in Edinburgh on Henry's "Melano-precipitation" test mainly among patients undergoing malaria therapy for general paralysis. The technique of the reaction has been improved by the substitution of melanin pigment extracted from human hair for that obtained from ox choroid membrane as originally employed by Henry.

It has emerged from studies in collaboration with Lt.-Col. Greig and Dr. E. B. Henry of the Royal Infirmary, that positive results recorded in malaria are primarily due to an increase in the serum euglobulin fraction in this disease.

Moreover, a number of reagents other than melanin pigment solution, for example, distilled water, may precipitate the excessive serum euglobulin present.

The best results, however, have been obtained by the use of melanin pigment solution and the test appears to have a definite clinical value as a laboratory aid to the diagnosis of latent malarial infection.

(C. E. van Rooyen.)

## FURTHER EXPERIMENTAL OBSERVATIONS ON THE ÆTIOLOGY OF HODGKIN'S DISEASE.

The discovery by M. H. Gordon of a pathogenic agent in lymphadenomatous tissue, which can be demonstrated by the production of a characteristic encephalitic syndrome in rabbits following the intracerebral inoculation of emulsions of such tissue, has thrown open an entirely new avenue to the study of the ætiology of Hodgkin's disease. Further, this finding has formed the basis of a biological test for the diagnosis of the disease. There is still, however, considerable dubiety as to the exact nature of this pathogenic agent. Three hypotheses have been advanced to explain its nature and mode of action :—(1) That it belongs to the category of ultramicroscopic viruses ; (2) that it is of the nature of a toxin which has a special action on the brain tissue of the rabbit ; (3) that it is a proteolytic tissue enzyme similar to that described by various workers early in the present century. Thus, a method for extracting it from tissues has been described and the conclusion has been drawn that it cannot be a living organism (Friedemann).

This last theory has formed the subject of research during the past year. It has been possible to show that the encephalitogenic agent can be extracted from lymphadenomatous glands by the method alluded to. This method of extraction, however, completely fails to yield the pathogenic agent from lymph glands affected with any other disease, and thus it may be said that the basis of the diagnostic test has not been affected in any way. The fact has also been confirmed that this agent is present in, and can be extracted from spleen, bone-marrow and leucocytes (normal or pathological).

Careful examination of the comparative encephalitogenic and proteolytic properties of extracts of lymph glands affected with lymphadenoma and other conditions (*e.g.*, tuberculosis, lymphosarcoma, carcinoma and the leukæmias), splenic and bone-marrow tissue and leucocytes have, however, completely failed to reveal any correlation between the two. Thus extracts of lymphadenomatous glands which are actively encephalitogenic may be completely devoid of proteolytic action, whereas extracts of glands affected with carcinoma are proteolytic, but not encephalitogenic. The same is true of the various other tissues examined, some of the extracts having both a proteolytic and an encephalitogenic action, others only a proteolytic action and the remainder being pathogenic but not proteolytic.

Further experiments have been conducted to test the powers of resistance of various bacteria to the process by which the encephalitogenic agent is extracted. It was found that the sporing organisms easily resisted this treatment, while of the non-sporing organisms examined, certain strains of *Staphylococcus aureus* and enterococcus were also resistant.



From these results it has been concluded :—(a) That the encephalitogenic action of extracts of lymphadenomatous and other tissues cannot be due to a proteolytic action *per se* ; (b) that it cannot be identified with any of the proteolytic tissue enzymes that have been investigated ; (c) that the method used for the extraction of the encephalitogenic agent is not sufficient for the destruction of all forms of living organisms.

It is still impossible, however, to define the nature of this unique pathogenic principle.

(I. Mackenzie. and C. E. van Rooyen)

The following papers on subjects related to preventive medicine have been published during the year from the University Bacteriology Department :—

- "Observations on the association of hæmolytic streptococcal infection with Acute Rheumatism." By W. A. R. Thomson, *Brit. Med. Journ.*, 1934, vol. 1, p. 1162 (also from the Department of Medicine).
- "Inquiry into the family incidence of acute rheumatism." By J. A. Fraser Roberts and W. A. R. Thomson, *Ann. of Eugenics*, 1934, vol. 6, p. 3 (also from the Institute of Genetics).
- "Three cases of tuberculosis of the central nervous system in children—apparent recovery." By A. R. MacGregor, H. J. R. Kirkpatrick and W. S. Craig, *Lancet*, 1934, vol. 2, p. 18. (also from the Pathology Department, Royal Hospital for Sick Children).
- "The milk supplies of the country from the public health standpoint." By T. J. Mackie, *Scottish Journ. of Agric.*, 1934, vol. 17, p. 14 (Abstract of paper opening a discussion at the British Association Meeting, 1933).
- "Some factors predisposing to infection by *Vibrio septique* from the alimentary canal." By G. R. Borthwick, *Brit. Jour. Exper. Path.*, 1934, vol. 15, p. 153.
- "The liver in relation to normal and malignant growth." By A. Haddow, *Amer. Journ. of Cancer.*, 1934, vol. 22, p. 308.
- "Carbohydrate and nucleoprotein fractions isolated from the Brucella group." By L. E. Topping, *Jour. of Path. and Bact.*, 1934, vol. 39, p. 665.
- "Value of Gordon's test in the diagnosis of mediastinal Hodgkin's disease ; report of two illustrative cases." By R. F. Ogilvie and C. E. van Rooyen, *J. Amer. Med. Assoc.*, 1934, vol. 102, p. 1842 (also from the Department of Pathology).
- "Some properties of the encephalitogenic agent in lymphadenomatous tissue with further observations on Gordon's biological test in the diagnosis of Hodgkin's disease." By C. E. van Rooyen, *Brit. Med. Journ.*, 24th March, 1934.
- "Observations on the melano-precipitation serological reaction in malaria." *Trans. R. Soc. Trop. Med. Hyg.*, 1934, vol. 28, p. 175 ; "A note on the melano-precipitation serological reaction in malaria." *J. Trop. Med. Hyg.*, 1934, vol. 37, p. 193 ; "Serological diagnosis of latent malaria." *Lancet*, 30th June, 1934. By E. D. W. Greig, C. E. van Rooyen and E. B. Hendry (also from the Department of Tropical Medicine and of Therapeutics).
- "Observations on the bactericidal properties of leucocytes and blood-platelets with particular reference to their action in the presence of normal serum." By T. J. Mackie, C. E. van Rooyen and M. H. Finkelstein, *J. Path. Bact.*, 1934, vol. 39, p. 89.

The Bacteriological Services have been carried out under the direction of Professor T. J. Mackie.

The Professional Staff of the University who took part in the services during 1934 were :—Dr. H. J. Gibson, Dr. C. P. Beattie, Dr. A. Haddow, and Dr. H. J. R. Kirkpatrick, Lecturers ; Dr. C. E. van Rooyen, Dr. C. A. Green, Dr. I. MacKenzie, Dr. S. Thomson, and Dr. May H. Christison, Assistants.

Voluntary assistance in special investigations was given by Dr. H. A. Wright, Miss G. R. Borthwick, B.Sc., Mrs A. C. Stirling, B.Sc., and Mr R. O. Muir, B.Sc.



## MATERNITY AND CHILD WELFARE.

REPORT BY MATERNITY AND CHILD WELFARE MEDICAL OFFICER.

The following is a report of the work carried on under the Maternity and Child Welfare Scheme for the year 1934. The usual statistical tables, referred to under each heading, will be found at the end of the report. This year the facts stated are mainly statistical—a more detailed description of the various activities carried on under the Scheme is published at five yearly intervals. Reference to last year's report should be made for this information.

### **Ante-Natal Supervision (Table 1).**

In 1934 the number of attendances at the City Clinics was 26,568, compared with 24,441 in the previous year—an increase of fully 2,000. It is interesting to note that this figure is accounted for, not so much by a larger number of individuals coming to the clinics, as by an increased number of attendances by separate individuals. The increase, therefore, is in the right direction, for there is no doubt that the value of an ante-natal clinic depends much more upon the regularity of attenders and the frequency of their visits than upon the actual number of individuals attending the clinic. In addition to routine visiting, the Health Visitors paid 3,461 visits to expectant mothers for special purposes.

### **Post-Natal Supervision (Table 2).**

Here the figures show a slow but steady increase from year to year. In 1934 the attendances numbered 2,953, compared with 2,593 in 1933.

### **Midwives Act (Table 3).**

There were 21 names on the local roll of practising midwives, compared with 19 a year ago. These attended 332 cases or 4 per cent. out of a total of 8,323 notified births. Medical assistance was required in 34 cases, compared with 32 in the previous year. No cases of ophthalmia neonatorum occurred in the practice of midwives during the year. Seven deaths of new-born children (within 10 days) and seven cases of stillbirth occurred in the practice of midwives, out of a total of 224 and 424 respectively for the whole City.

### **Maternity Homes Act, 1928.**

The number of Homes under the Local Authority was 35. During the year three new Homes were added to the list.

### **Puerperal Fever and Pyrexia (Tables 4 to 9).**

During 1934 there were notified 88 cases of puerperal fever and 88 cases of puerperal pyrexia, compared with 86 and 69 respectively for the previous year. On later investigation it was found that of the 88 notified cases of puerperal fever the diagnosis was confirmed in 83, also that of the 88 cases of puerperal pyrexia 36 developed into puerperal fever, making in all a total of 119 cases of confirmed puerperal fever. The deaths from puerperal fever numbered 17, compared with 8 in 1933. Six of these deaths

occurred in the group of 36 cases originally notified as puerperal pyrexia—a case mortality of 16·6 per cent. The case mortality of the remainder was 13·3 per cent. The age periods at which the patients contracted puerperal fever as well as the age periods at which the 17 deaths occurred are shown on tables 8 and 9.

### **Maternal Deaths** (Tables 10 to 15).

The total number of maternal deaths occurring in the City was 84, an increase of 5 compared with the previous year. After eliminating from this figure the deaths of 34 women belonging to areas outside Edinburgh, there remain 50 deaths of Edinburgh citizens to be noted, compared with 48 in 1933, 47 in 1932, 51 in 1931 and 59 in 1930. The maternal mortality rate for the year was 6·95 per 1000 births, compared with 7·02 for 1933. Puerperal sepsis accounted for 21 deaths or 2·9 per 1000 births, compared with 11 deaths or 1·6 per 1000 births in the previous year, and the toxæmias of pregnancy for 7 deaths or 0·9 per 1000 births, compared with 13 or 1·9 per 1000 births in the previous year.

### **Births** (Tables 16 to 20).

The registered births numbered 7,913, compared with 7,518 for the previous year. After necessary transfers had been made, the number allocated to the City was 7,188, compared with 6,835 in 1933. Of these births 3,722 were males and 3,466 were females. The corrected birth rate for the City was 15·7, compared with 15·1 for the previous year; this is the first increase that has occurred since 1926, though the rate remains the lowest compared with the eight larger towns in Scotland.

The total births notified were 8,323, compared with 7,955 for the previous year. Of these 549 were stated to be premature and 424 were of still-born infants.

The illegitimate births numbered 457 or 6·4 per cent. of the total corrected births. This rate remains fairly constant from year to year.

### **Ophthalmia Neonatorum** (Table 21).

During the year 46 cases were notified as suffering from this condition and in none of them was the eyesight impaired. It is noteworthy that the majority of these cases were removed to Hospital for treatment, thus giving every chance of speedy recovery.

### **Deaths** (Tables 22 to 26).

The deaths of infants under one year registered during the year numbered 449 and the mortality rate was equivalent to 62 deaths per 1000 births, compared with a rate of 66 in 1933. Of these, as usual, the great majority died in the early weeks of life, 207 or 46 per cent. dying in the neonatal period—equivalent to a rate of 28·8 per 1000 births.

Deaths of illegitimate infants numbered 44 out of the total 449 deaths under one year, equal to a rate of 96·2 per 1000 illegitimate births. The corresponding figures for legitimate infants were 405 and 60·1 respectively.

## Visits in the Homes.

During the year, 5,877 infants under one year were under the supervision of Health Visitors and received 26,387 visits. In addition, the health visitors paid 61,698 visits to children between one and five years of age, and 3,461 ante-natal visits. Members of the Voluntary Health Workers' Association, who assist with the visiting, paid 1,367 visits at fortnightly intervals to children under 15 months old.

## Clinics.

In addition to the ante-natal and post-natal work already referred to, clinics are held at 13 centres in different areas of the City.

### *Preventive Clinics (Table 27).*

During the year 2,864 children were brought for health supervision and the total attendances reached 34,008, compared with 2,669 and 32,020 respectively for 1933.

### *Curative Clinics (Table 28).*

During the year there were 3,284 new cases with a total attendance of 18,016, compared with 2,869 and 17,539 respectively for the previous year. A clinic in the new housing area at Niddrie was started on 23rd October.

### *Ultra Violet Ray Clinics (Table 29).*

During the year 538 children received attention at these clinics, compared with 193 in the previous year. This involved 2,401 exposures to the Mercury Vapour Lamp and 1,576 exposures to the Carbon Arc Lamp, compared with 2,306 and 1,317 respectively for 1933.

### *Rheumatic Clinic (Table 30).*

At this clinic, which is held at the Royal Hospital for Sick Children, 69 new cases and 721 old cases were examined, compared with 65 and 657 respectively for the previous year. Of the 69 new cases 54 were definitely diagnosed as of a rheumatic nature, compared with 42 in 1933, and 15 were found to be due to other non-rheumatic conditions compared with 23. The total number of notifications during the year was 77, which was 5 more than in the previous year. Dr Carmichael and Dr Thatcher who are in clinical control report that the new cases fall into five groups according to their chief disability.

- (1) Those suffering from Carditis.
- (2) Those suffering from Chorea.
- (3) Those suffering from Arthritis.
- (4) Those suffering from Minor Rheumatic Manifestations.
- (5) Those suffering from Non-Rheumatic Conditions.

Looking at these in more detail we see that in the group of:—

(1) *Carditis Cases*.—Fourteen were seen and of these 7 had been under treatment elsewhere. In the other 7 cases, the carditis came on insidiously, and the patients had not had any previous treatment.

(2) *Chorea*.—Twenty-five cases were seen and in 9 of these carditis was found to be present also. In all the 25 cases the chorea was a first attack and the first manifestation of rheumatism. So far none of these cases has had a second attack of chorea.

(3) *Arthritis*.—These cases were 9 in number. In 4 of them there was co-existing carditis.

(4) *Other Rheumatic Manifestations*.—These cases were 6 in number; 5 complained of growing pains and one was a case of erythema nodosum.

It will be noted that of the 54 cases of definite rheumatism, 27 of them (50 per cent.) showed evidence of cardiac involvement in their first attack of rheumatism.

(5) *Non-Rheumatic Cases*.—These were 15 in number. A list of these is shown on table 30.

### **Mothercraft Classes.**

A total of 303 mothers (37 more than in 1933) attended these classes and of these 164 entered for the Hutchison Shield competition, compared with 131 in the previous year. The shield was won for the Elsie Inglis Clinic by Mrs Richardson. In addition, 75 mothers and 4 fathers sent in work, for the best of which, prizes were given. The summer gathering, at which these mothers were presented with their prizes, was held in June at Spylaw Park, Colinton, when Sir Andrew and Lady Grierson graced the proceedings with their presence and handed the silver shield and various other gifts to the winners. A very happy afternoon was spent by one and all and it is with great pleasure that the Staff take this opportunity of thanking Sir Andrew and Lady Grierson for their interest in this special aspect of the Department's work.

### **Special Demonstrations in Cookery.**

These demonstrations which were so admirably carried out by the late Miss Gilmour were temporarily put into abeyance after her death. In October, however, they were revived and Mrs Bruce of 15 Blackford Avenue, was asked to undertake the work. Since then both Portobello and Leith mothers have benefited from Mrs Bruce's teaching.

### **Milk and Dinners (Table 31).**

More milk was granted and fewer dinners this year, compared with last year. This has, in some measure, been due to the lack of facilities for supplying dinners in the outlying new housing areas, such as Niddrie—a disadvantage that will soon be remedied.

### **Day Nurseries (Table 32).**

The figures for the present year show a reduction in attendances compared with 1933, the total attendances numbering 19,520 compared with 22,819. The reduction is noted in both infants and children and affects each of the four day nurseries.



## Toddler Playgrounds (Table 33).

There are 15 of these playgrounds now in existence, with a daily attendance of 504 out of an effective roll of 683. The figures for 1933 were 516 and 726 respectively.

## Child Gardens.

Children who attend the voluntary Child Gardens (eight in number) are periodically examined by medical members of the Child Welfare Staff.

## Homes for Mothers and Infants.

A number of such Homes in the City work in close association with the Child Welfare Department ; the following figures refer to them.

(1) *The Edinburgh Home for Mothers and Babies at 17 Claremont Park, Leith*, had in residence on 1st January, 1934, 9 mothers and 6 infants. During the year 29 mothers and 26 babies were admitted and 27 mothers and 24 babies were discharged, leaving at the end of the year 11 mothers and 8 infants still in residence in the Home.

(2) *The Salvation Army Home for Mothers and Infants at Bonnington Bank House*. This Home had in residence on 1st January, 1934, 18 mothers and 13 babies. During the year 40 mothers and 28 babies were admitted and 38 mothers and 30 babies were discharged, leaving still in residence at the end of the year 20 mothers and 11 babies.

(3) *Hawthornbrae Convalescent Home, Duddingston*. During the year 30 mothers and 24 infants were sent for periods of two weeks to this Home.

(4) *Edinburgh Home for Babies, 30 Colinton Road*.—At the beginning of the year 20 babies were in residence in this Home, and during the year 15 were admitted and 15 discharged. At the associated Home at 3 Forbes Road, under Miss Waldie's care, 6 babies were in residence on 1st January, 1934, and 7 were admitted and 7 discharged during the year.

(5) *Humbie Children's Village*.—During the year 218 (compared with 198 in 1933) children between three and five years of age received the benefit of a three or four weeks' holiday at the Children's Village.

**Other Homes.**—Other Homes, which do not receive any financial assistance from the Corporation, but whose committees co-operate with its Child Welfare Work, are the *Leadburn Home for Tired Mothers* and *Providence House at Kinghorn*, also the *Convalescent Home at Fushiebridge*, carried on by the Misses Romanes, to which children attending the Rheumatic Clinic are sent for convalescence. During the year in addition to 34 rheumatic children (23 girls and 11 boys) 7 mothers and 7 babies and 2 girls and 7 boys benefited very much from a change to this Home.

**Victoria Park Home** for infants and children suffering from debility, dealt with 145 such cases, compared with 139 in 1933. The average daily number of children under treatment was 22.

**Acknowledgments.**—It is with pleasure that I take this opportunity of expressing my appreciation of the help which I have received during the past year from all the members of the staff as well as from all voluntary agencies.

TABLE 1.—ANTE-NATAL CLINICS.

CENTRE.	Number of Clinics held.	ATTENDANCES.		
		New Cases.	Old Cases.	Total.
Cowgate . . . . .	97	430	764	1,194
Torphichen Street . . . . .	54	162	963	1,125
Marshall Street . . . . .	39	41	174	215
Royal Maternity Hospital . . . . .	364	2,478	11,524	14,002
Leith . . . . .	48	381	897	1,276
Elsie Inglis Memorial Hospital . . . . .	156	1,378	5,535	6,913
Prestonfield . . . . .	30	104	343	447
Niddrie . . . . .	20	99	284	383
Portobello . . . . .	52	92	365	457
Stockbridge . . . . .	52	131	423	554
Totals . . . . .	912	5,296	21,272	26,568
Figures for 1933 . . . . .	913	5,104	19,337	24,441

TABLE 2.—POST-NATAL CLINICS.

CENTRE.	No. of Clinics held.	Attendances.
Royal Maternity Hospital. . . . .	52	1,302
Elsie Inglis Memorial Hospital . . . . .	85	1,404
Seen at other Centres . . . . .	...	247
Totals . . . . .	137	2,953

TABLE 3.—MIDWIVES ACT.

1. The number of certified Midwives who intimated to the Local Authority their intention to practise in the district . . . . .	21
2. (a) Total number of Births . . . . .	7,913
(b) Total number of Deaths of New-born Children (within 10 days) . . . . .	224
(c) Actual number of Births attended by Midwives . . . . .	332
(d) Deaths of New-born Children occurring in the practice of Midwives . . . . .	7
(e) Number of Births not attended by a Doctor or Midwife . . . . .	4
3. (a) Total number of cases of Ophthalmia Neonatorum . . . . .	46
(b) Actual number of Ophthalmia Neonatorum cases occurring in the practice of Midwives . . . . .	0
(c) Actual number of cases occurring where confinement not attended by a Doctor or Midwife . . . . .	0
4. (a) Total number of cases of Puerperal Sepsis . . . . .	119
(b) Total number of Deaths from Puerperal Sepsis . . . . .	21
(c) Actual number of cases of Sepsis in practice of Midwives . . . . .	2
(d) Actual number of Deaths from Puerperal Sepsis in practice of Midwives . . . . .	1
(e) Actual number of cases occurring where confinement not attended by a Doctor or Midwife . . . . .	0
5. (a) Total number of cases of Confirmed Puerperal Pyrexia . . . . .	52
(b) Total number of Deaths from Puerperal Pyrexia . . . . .	9
(c) Actual number of cases of Puerperal Pyrexia in practice of Midwives . . . . .	0
(d) Actual number of Deaths from Puerperal Pyrexia in practice of Midwives . . . . .	0
(e) Actual number of cases occurring where confinement not attended by a Doctor or Midwife . . . . .	0
6. (a) Total number of Still-births . . . . .	424
(b) Actual number of cases of Still-births occurring in the practice of Midwives . . . . .	7
7. Cases of Emergency . . . . .	34

Cases of emergency in which medical practitioners were called in, under Section 22 of the Act, during 1934 are noted in the following classified list, and number 34 as compared with 32 in 1933 :—

*Cases of Emergency.*

Delay in Labour . . . . .	7
Premature Birth . . . . .	4
Still-birth . . . . .	7
Placenta Prævia . . . . .	2
Retained Placenta . . . . .	1
Perineal Tear . . . . .	5
Illness of Child . . . . .	3
Prolapse of Cord . . . . .	1
Breech Birth . . . . .	1
Face Presentation . . . . .	1
Persistent Occipito Posterior . . . . .	2
	<hr/>
	34
	<hr/>

TABLE 4.—PUERPERAL PYREXIA.

Total number of cases of puerperal pyrexia notified . . . . .	88
Total number subsequently developing into puerperal fever . . . . .	36
Total number of deaths of cases notified as puerperal pyrexia—	
Puerperal septicæmia . . . . .	6
Embolism . . . . .	1
Broncho Pneumonia . . . . .	1
Cerebro-Spinal Fever . . . . .	1
	<hr/>
	9

TABLE 5.—PUERPERAL FEVER.

Total number of cases of puerperal fever notified . . . . .	88
Total number of cases notified but not confirmed—	
Urinary Infection . . . . .	1
Mammary Abscess . . . . .	1
Scarlet Fever . . . . .	1
Aplastic Anæmia . . . . .	1
Secondary Anæmia . . . . .	1
	<hr/>
	5
	<hr/>
	83
	<hr/>

TABLE 6.—RESUME OF CONFIRMED CASES OF PUERPERAL FEVER.

Notified as puerperal fever . . . . .	83
Notified as puerperal pyrexia . . . . .	36
	<hr/>
TOTAL . . . . .	119
	<hr/>

TABLE 7.—DEATHS FROM CONFIRMED CASES OF PUERPERAL FEVER

Number notified as puerperal fever . . . . .	1
Number notified as puerperal pyrexia . . . . .	1
TOTAL . . . . .	2

TABLE 8.—AGES of PATIENTS suffering from PUERPERAL FEVER.

15 years and under 20 years . . . . .	10
20 years and under 25 years . . . . .	31
25 years and under 30 years . . . . .	37
30 years and under 35 years . . . . .	23
35 years and under 40 years . . . . .	14
40 years and over . . . . .	4
TOTAL . . . . .	<u>119</u>

TABLE 9.—AGES at DEATH of PATIENTS suffering from Confirmed PUERPERAL FEVER.

15 years and under 20 years . . . . .	1
20 years and under 25 years . . . . .	1
25 years and under 30 years . . . . .	5
30 years and under 35 years . . . . .	5
35 years and under 40 years . . . . .	5
TOTAL . . . . .	<u>17</u>

TABLE 10.

MATERNAL DEATHS, 1930-1934.	1930	1931	1932	1933	1934
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Cases attended by—					
Private Doctors and died in their own homes . . . . .	17	16	13	10	10
Private Doctors and removed to Institutions . . . . .	45	49	32	23	22
Midwives and removed to Institutions . . . . .	2	...	...	...	4
Dispensaries and Pupil Nurses and removed to Institutions	12	4	11	10	10
Dispensaries and Pupil Nurses at home . . . . .	2	...	2	...	...
Attended in Institutions . . . . .	22	31	42	55	50
No Medical care . . . . .	...	...	...	2	4
Totals . . . . .	100	100	100	100	100



TABLE 11.—MATERNAL DEATHS.

## AGES AT DEATH :—

Under 20 years	. . . . .	1 or 2.0	per cent. of the total.
20 years and under 25 years	. . . . .	9 „ 18.0	„ „ „
25 years and under 30 years	. . . . .	14 „ 28.0	„ „ „
30 years and under 35 years	. . . . .	18 „ 36.0	„ „ „
35 years and under 40 years	. . . . .	6 „ 12.0	„ „ „
40 years and under 45 years	. . . . .	2 „ 4.0	„ „ „
TOTAL	. . . . .	50	100.0

TABLE 12.

## CAUSES OF DEATH :—

		<i>Conditions complicating or associated with Childbirth.</i>	
<i>Septicæmia.</i>			
Puerperal sepsis	21	Rupture of Uterus	2
		Pneumonia	2
		Acute Pulmonary Œdema	1
		Organic Heart Disease	2
<i>Toxæmia.</i>			
Toxæmia without convulsions	2	Acute Heart Failure	1
Eclampsia	2	Shock	1
Glycæremia	1	Chronic Nephritis	1
Acute Liver Atrophy	2	Pernicious Anæmia	1
	7	Aplastic Anæmia	1
<i>Hæmorrhage.</i>			
Postpartum Hæmorrhage	3	Acute Cerebral Compression	1
Placenta Prævia	2	Erysipelas	1
	5	Cerebral Spinal Fever	1
<i>Embolism.</i>			
Number of Deaths	2	TOTAL	50

TABLE 13.

## MATERNAL DEATHS 1934.

## Cases attended by—

	Septicæmia.	Toxæmia.	Hæmorrhage.	Embolism.	Other conditions complicating or associated with Child-birth.	Totals.
Private Doctors and died at home	1	0	1	2	1	5
Private Doctors and removed to Institutions	6	2	1	0	2	11
Midwives and removed to Institutions.	1	0	0	0	1	2
Dispensaries and Pupil Nurses and removed to Institutions	2	0	0	0	3	5
Dispensaries and Pupil Nurses at home	0	0	0	0	0	0
In Institutions	11	5	3	0	6	25
No Medical Care	0	0	0	0	2	2
Totals	21	7	5	2	15	50

TABLE 14.—MATERNAL DEATHS, 1925-1934.

TOTALS.

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Septicæmia . . .	13	13	17	20	19	13	16	14	11	21
Toxæmia . . .	3	8	10	10	12	19	10	7	13	7
Hæmorrhage . . .	7	6	9	7	9	4	5	4	2	5
Embolism . . .	4	5	5	4	2	1	4	2	3	2
Other Conditions .	16	10	12	17	9	22	16	20	19	15
	43	42	53	58	51	59	51	47	48	50

TABLE 15.—RATE PER 1000 BIRTHS.

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Septicæmia . . .	1·7	1·6	2·2	2·7	2·6	1·8	2·2	2·0	1·6	2·7
Toxæmia . . .	·4	1·0	1·3	1·3	1·6	2·6	1·4	1·0	1·9	·9
Hæmorrhage . . .	·9	·8	1·2	·9	1·2	·5	·7	·6	·3	·6
Embolism . . .	·5	·6	·7	·5	·3	·1	·6	·3	·4	·3
Other Conditions . .	2·0	1·3	1·6	2·3	1·2	3·0	2·2	2·1	2·8	1·9

TABLE 16.—Particulars regarding BIRTHS after necessary corrections have been made for transfers.

Quarter.	Total Births.	Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
1st . . . . .	1,868	1,730	138	7·4
2nd . . . . .	1,862	1,743	119	6·4
3rd . . . . .	1,717	1,610	107	6·2
4th . . . . .	1,741	1,648	93	5·3
Totals . . . .	7,188	6,731	457	6·4

TABLE 17.—BIRTHS allocated according to the three areas of the extended City.

Area.	Births.	Rate per 1000 of Population.
Edinburgh . . . . .	4,899	14·9
Leith . . . . .	1,395	16·5
Suburban . . . . .	721	23·3
Institutions . . . . .	144	...
Military Quarters . . . . .	29	...
Whole City . . . . .	<u>7,188</u>	<u>15·7</u>

TABLE 18.—Corrected BIRTH-RATES for the eight large towns in Scotland and for the whole of Scotland for 1934.

TOWN.	Per 1000 of Population.	TOWN.	Per 1000 of Population.
Glasgow . . . . .	19·6	Paisley . . . . .	18·1
Edinburgh . . . . .	15·7	Greenock . . . . .	20·9
Dundee . . . . .	18·7	Motherwell and Wishaw . . . . .	20·5
Aberdeen . . . . .	17·9	Clydebank . . . . .	18·2
SCOTLAND . . . . .		18·0	

TABLE 19.—NOTIFICATION OF BIRTHS—Analysis of 8,323  
Births notified during the year.

I.	Births attended by Private Doctors . . . . .	1,790
II.	Births attended by Private Doctors with a District Nurse—	
	(1) Queen's Nurses . . . . .	900
	(2) Buccleuch Place Nurses . . . . .	124
		— 1,024
III.	Births attended by Registered Midwives . . . . .	332
IV.	Births attended at home by Students and Pupil Nurses—	
	(1) Royal Maternity Hospital . . . . .	986
	(2) Elsie Inglis Memorial Hospital . . . . .	550
	(3) Cowgate Dispensary . . . . .	306
	(4) Deaconess Hospital . . . . .	81
		— 1,923
V.	Births attended in Maternity Hospitals and Training Centres—	
	(1) Royal Maternity Hospital . . . . .	2,001
	(2) Elsie Inglis Memorial Hospital . . . . .	1,084
	(3) Deaconess Hospital . . . . .	6
	(4) Western General Hospital . . . . .	161
		— 3,252
VI.	Births unattended . . . . .	2
	(in addition there were 2 births which were not notified).	
		— 8,323

TABLE 20.—Analysis of comparable figures in percentages of the  
BIRTHS for the past five years.

	1930	1931	1932	1933	1934
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Births attended by—					
Private Doctors . . . . .	40	36	35	35	34
Private Doctors with a District Nurse } . . . . .					
Registered Midwives . . . . .	5	5	4	4	4
Students and Pupil Nurses in Patient's Home . . . . .	21	21	21	21	23
In Maternity Hospitals and Training Centres . . . . .	34	38	40	40	39
	100	100	100	100	100

TABLE 21.—OPHTHALMIA NEONATORUM. The interval in days between the Birth of the Child and the onset of the disease.

Days . . .	1	2	3	4	5	6	7	8	9	10	Over 10 days and under 3 months.	No Particulars.	Total.
[Cases . . .	3	3	1	1	5	4	5	2	3	8	9	2	46

The Confinement was attended by :—

A Doctor and Nurse . . . . .	9 cases.
Nurses from Institutions . . . . .	3 cases.
Dispensaries . . . . .	10 cases.
In Institutions . . . . .	24 cases.—Total, 46 cases.

Treatment was given :—

At Home . . . . .	13 cases.
At Home and Welfare Centres . . . . .	6 cases.
In Hospital . . . . .	27 cases.—Total, 46 cases.

Hospital treatment was given :—

In Northern General Hospital . . . . .	25 cases.
In Elsie Inglis Hospital . . . . .	1 case.
In Royal Infirmary . . . . .	1 case.—Total, 27 cases.

A Queen's Jubilee Nurse or a Nurse from the Royal Maternity Hospital attended to those children who were treated in their homes.

TABLE 22.—Distribution of the DEATHS under ONE YEAR in the different districts of the City, together with the MORTALITY-RATE for the respective areas.

Area.	Deaths under 1 year.	Deaths per 1000 Births.
Edinburgh . . . . .	290	59
Leith . . . . .	99	71
Suburban . . . . .	41	57
Institutions . . . . .	18	...
Military Quarters . . . . .	1	...
Whole City . . . . .	449	62
Figures for 1933 . . . . .	453	66



TABLE 23.—Edinburgh—INFANTILE MORTALITY (deaths under ONE YEAR per 1000 Births).

Year.	Infantile Mortality.	Year.	Infantile Mortality.	Year.	Infantile Mortality.	Year.	Infantile Mortality.
1880	143	1895	152	1910	103	1925	96
1881	128	1896	122	1911	115	1926	80
1882	121	1897	164	1912	110	1927	80
1883	128	1898	*141	1913	101	1928	75
1884	135	1899	147	1914	110	1929	80
1885	120	1900	132	1915	132	1930	82
1886	136	1901	143	1916	100	1931	69
1887	137	1902	119	1917	‡123	1932	73
1888	128	1903	117	1918	94	1933	66
1889	133	1904	125	1919	§117	1934	62
1890	144	1905	124	1920	89	...	...
1891	138	1906	112	1921	96	...	...
1892	135	1907	121	1922	91	...	...
1893	148	1908	†114	1923	82	...	...
1894	125	1909	113	1924	89	...	...

\* Sanitary Dept. formed 1898. † Voluntary Visiting in homes. ‡ Child Welfare Dept. formed May, 1917.

§ Reflection world influenza epidemic, 1918-1919.

TABLE 24.—Particulars regarding BIRTHS, DEATHS of CHILDREN at age periods from ONE to FIVE YEARS, and also the INFANTILE MORTALITY in each of the twenty-three Municipal Wards.

WARD.	BIRTHS.		DEATHS.						Infantile Mortality (Rate per 1000 Births).
	Number.	Per 1000 of Population.	Under 1 Year.	1-2.	2-3.	3-4.	4-5.	Total.	
Calton . . . . .	333	14.9	21	3	...	1	...	25	63
Canongate. . . . .	381	17.3	20	...	1	1	...	22	52
Newington . . . . .	237	10.9	10	3	3	1	...	17	42
Morningside . . . . .	153	6.9	7	...	...	...	...	7	46
Merchiston . . . . .	198	9.6	5	...	...	3	...	8	25
Gorgie . . . . .	604	22.7	32	4	3	2	1	42	53
Haymarket . . . . .	164	9.1	9	2	...	1	...	12	55
St. Bernard's . . . . .	321	17.7	15	4	5	...	...	24	47
Broughton . . . . .	249	15.9	16	3	3	...	1	23	64
St. Stephen's . . . . .	220	12.4	12	1	2	...	2	17	55
St. Andrew's . . . . .	158	13.8	10	3	1	1	...	15	63
St. Giles . . . . .	344	16.4	23	7	1	2	...	33	67
Dalry . . . . .	346	16.0	17	3	2	1	4	27	49
George Square . . . . .	279	13.0	30	2	1	1	2	36	108
St. Leonard's . . . . .	338	16.2	27	5	3	1	1	37	80
Portobello . . . . .	574	21.4	36	7	3	1	...	47	63
South Leith . . . . .	457	15.2	25	5	1	1	...	32	55
North Leith . . . . .	412	20.0	25	9	5	2	1	42	61
West Leith . . . . .	277	14.1	21	4	...	3	1	29	76
Central Leith . . . . .	249	17.2	28	4	2	...	...	34	112
Liberton . . . . .	392	35.4	22	4	2	2	1	31	56
Colinton . . . . .	94	13.1	6	2	1	...	2	11	64
Corstorphine and Cramond . . . . .	235	18.5	13	...	...	...	...	13	55
Institutions . . . . .	144	...	18	6	1	...	...	25	...
Military Quarters . . . . .	29	...	1	...	...	...	...	1	...
Totals . . . . .	7,188	15.7	449	81	40	24	16	610	62
Edinburgh Area . . . . .	4,899	14.9	290	47	28	16	11	392	59
Leith Area . . . . .	1,395	16.5	99	22	8	6	2	137	71
Suburban Area . . . . .	721	23.3	41	6	3	2	3	55	57
Institutions . . . . .	144	...	18	6	1	...	...	25	...
Military Quarters . . . . .	29	...	1	...	...	...	...	1	...

TABLE 25.—CAUSES of DEATH among CHILDREN under FIVE YEARS during 1934.

CAUSE OF DEATH.	Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total under 12 Months.	12 Months and under 2 Years.	2, and under 3 Years.	3, and under 4 Years.	4, and under 5 Years.	Total 1-5 Years.	Total under 5 Years.
Chickenpox . . . . .	...	...	...	...	...	...	2	4	24	30	18	7	4	1	30	60
Measles . . . . .	...	...	...	...	...	...	2	1	1	3	2	3	4	...	9	10
Scarlet Fever . . . . .	...	...	...	...	...	...	2	1	1	3	2	3	4	...	2	5
Whooping Cough . . . . .	...	...	...	...	...	...	2	1	1	3	2	1	5	5	13	13
Diphtheria and Croup . . . . .	...	...	...	...	...	...	2	1	1	7	1	1	5	5	1	6
Erysipelas . . . . .	...	...	...	...	...	...	1	4	2	7	3	5	1	1	10	17
Tuberculous Meningitis . . . . .	...	...	...	...	...	...	5	...	...	5	3	3	1	1	8	13
Abdominal Tuberculosis . . . . .	...	...	...	...	...	...	5	...	...	5	3	3	1	1	8	13
Other Tuberculous Disease . . . . .	...	...	...	...	...	...	5	...	...	5	3	3	1	1	8	13
Meningitis (not Tuberculous) . . . . .	1	...	...	...	1	...	...	2	...	3	2	...	...	...	2	5
Hydrocephalus . . . . .	...	...	...	...	...	1	1	1	...	3	1	...	...	...	1	4
Convulsions . . . . .	2	1	...	...	3	1	1	1	...	6	2	...	...	...	2	8
Pneumonia (all forms) . . . . .	3	2	2	2	9	10	12	11	12	54	23	6	...	...	29	83
Bronchitis . . . . .	...	2	1	...	3	6	4	...	...	13	2	1	1	...	4	17
Laryngitis . . . . .	...	...	2	1	3	9	18	5	5	40	...	2	2	2	6	46
Diarrhœa and Enteritis . . . . .	2	...	...	...	2	4	2	1	1	10	6	2	...	1	9	19
Other Digestive Diseases . . . . .	13	2	...	1	16	1	2	1	...	20	...	...	1	...	1	21
Congenital Malformations . . . . .	3	1	...	...	4	1	2	1	...	8	...	...	...	...	...	8
Congenital Heart . . . . .	91	9	6	3	109	2	1	...	...	112	...	...	...	...	...	112
Premature Birth . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy, Debility and Marasmus . . . . .	13	2	2	1	18	15	4	4	1	42	...	...	...	...	...	42
Atelectasis . . . . .	2	1	1	...	4	...	1	...	...	5	...	...	...	...	...	5
Injury at Birth . . . . .	21	...	2	1	24	...	...	...	...	24	...	...	...	...	...	24
Suffocation, overlaying . . . . .	1	...	...	...	1	3	1	1	...	6	...	...	...	...	...	6
Syphilis . . . . .	...	...	...	...	...	2	...	...	...	2	...	...	...	...	...	2
Rickets . . . . .	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1
All other Causes . . . . .	5	3	...	2	10	15	6	5	11	47	14	10	5	5	34	81
Totals . . . . .	157	23	16	11	207	74	68	43	57	449	81	40	24	16	161	610

TABLE 26.—CAUSES of DEATH among ILLEGITIMATE CHILDREN under FIVE YEARS during 1934.

CAUSE OF DEATH.	Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total under 12 Months.	12 Months and under 2 Years.	2, and under 3 Years.	3, and under 4 Years.	4, and under 5 Years.	Total 1-5 Years.	Total under 5 Years.
Chickenpox . . . . .	...	...	...	...	...	...	1	1	5	7	5	...	...	...	5	12
Measles . . . . .	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
Scarlet Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Croup . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis . . . . .	...	...	...	...	...	...	1	1	...	2	...	...	...	...	...	2
Abdominal Tuberculosis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Disease . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous) . . . . .	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	1
Hydrocephalus . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Convulsions . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia (all forms) . . . . .	1	...	...	...	1	2	2	...	...	5	2	1	...	...	3	8
Bronchitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Laryngitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa and Enteritis . . . . .	...	...	...	...	...	5	1	1	...	7	...	...	...	...	...	7
Other Digestive Diseases . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital Malformations . . . . .	...	...	...	...	...	1	2	...	...	3	...	...	1	...	1	4
Congenital Heart . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Premature Birth . . . . .	3	1	...	1	5	...	...	...	...	5	...	...	...	...	...	5
Atrophy, Debility and Marasmus . . . . .	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	1
Atelectasis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Injury at Birth . . . . .	2	...	...	...	2	...	...	...	...	2	...	...	...	...	...	2
Suffocation, overlaying . . . . .	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1
Syphilis . . . . .	...	...	...	...	...	2	...	...	...	2	...	...	...	...	...	2
Rickets . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes . . . . .	2	...	...	1	3	3	1	1	...	8	2	...	...	...	2	10
Totals . . . . .	9	1	...	2	12	13	8	6	5	44	9	1	1	...	11	55

TABLE 27.—PREVENTIVE CLINICS.

CENTRE.	Number of Clinics held.	NEW CASES.			TOTAL ATTENDANCES.		
		Under 1 year.	Over 1 year.	TOTAL.	Under 1 year.	Over 1 year.	TOTAL.
Gorgie . . . . .	97	311	118	429	2,564	1,903	4,467
Torphichen Street . . . . .	101	233	43	276	2,497	1,682	4,179
High Street . . . . .	100	96	25	121	1,853	1,688	3,541
Pleasance . . . . .	138	254	69	323	3,971	2,326	6,297
Windsor Street . . . . .	114	367	96	463	3,077	1,150	4,227
Stockbridge . . . . .	102	226	85	311	2,494	1,348	3,842
*Marshall Street . . . . .	49	130	88	218	1,152	805	1,957
*Elsie Inglis Memorial Hospital . . . . .	52	183	74	257	1,221	810	2,031
Prestonfield . . . . .	52	83	31	114	1,006	657	1,663
Niddrie . . . . .	52	196	156	352	1,202	602	1,804
TOTALS . . . . .	857	2,079	785	2,864	21,037	12,971	34,008
Figures for 1933 . . . . .	793	1,893	776	2,669	19,818	12,202	32,020

\* These Dispensaries receive a grant from the Corporation.

TABLE 28.—CURATIVE CLINICS.

CENTRE.	Number of Clinics held.	ATTENDANCES.		
		Old Cases.	New Cases.	TOTAL.
*Cowgate . . . . .	97	2,338	266	2,604
Gorgie . . . . .	51	398	246	644
*Torphichen Street . . . . .	50	681	360	1,041
High Street . . . . .	46	1,417	56	1,473
*Marshall Street . . . . .	47	1,124	121	1,245
Portobello . . . . .	102	2,668	239	2,907
Leith . . . . .	142	4,378	1,076	5,454
*Elsie Inglis Memorial Hospital . . . . .	89	1,140	783	1,923
Windsor Street . . . . .	49	525	96	621
Niddrie . . . . .	10	63	41	104
TOTALS . . . . .	683	14,732	3,284	18,016
Figures for 1933 . . . . .	682	14,670	2,869	17,539

\* These Dispensaries are subsidised by the Corporation, the clinics being conducted by doctors on the regular staffs of the Dispensaries.

TABLE 29.—ULTRA VIOLET RAY CLINICS.

CENTRE.	Number of Cases.	Number of Exposures given.	
		M.V. Lamp.	C.A. Lamp.
Leith . . . . .	384	1,037	...
Pleasance . . . . .	154	1,364	1,576
TOTALS . . . . .	538	2,401	1,576

TABLE 30.—RHEUMATIC CLINIC.

ANALYSIS OF 69 NEW CASES SEEN AT RHEUMATIC CLINIC.

<i>Rheumatic.</i>		<i>Other Conditions.</i>	
Carditis only . . . . .	14	General debility . . . . .	4
Chorea only . . . . .	16	Nervous Instability . . . . .	4
Chorea and Carditis . . . . .	9	Anæmia . . . . .	2
Arthritis only . . . . .	5	Malnutrition . . . . .	1
Arthritis and Carditis . . . . .	4	Glands in Neck (T.B.) . . . . .	1
Other Rheumatic conditions . . . . .	6	Congenital Heart Disease . . . . .	1
	—	Habit Spasm . . . . .	1
	54	Asthma and Psoriasis . . . . .	1
	==		15

TABLE 31.—MILK AND DINNERS.

The distribution of **Milk and Dinners** during the year was as follows :—

Milk—Assisted . . . . .	92,049½ pints
Free . . . . .	231 „
Dinners—Assisted . . . . .	14,641
Free . . . . .	6

TABLE 32.—DAY NURSERIES.

Day Nursery.	Attendances— Infants.	Attendances— Children.	Total. Attendances.
Henderson Row . . . . .	1,055	2,581	3,636
Dumbiedykes Road . . . . .	1,464	4,227	5,691
Viewforth Terrace . . . . .	771	2,836	3,607
South Fort Street, Leith . . . . .	1,617	4,969	6,586
TOTALS . . . . .	4,907	14,613	19,520
Figures for 1933 . . . . .	5,027	17,792	22,819

TABLE 33.—TODDLER PLAYGROUNDS.

CENTRE.	Number on roll.	Daily attend- ances.	CENTRE.	Number on roll.	Daily attend- ances.
Barony Place . . . . .	54	39	Tollcross . . . . .	61	26
Chessel's Court . . . . .	15	10	Tron Square . . . . .	43	33
Cowgate . . . . .	40	23	Leith—Junction Street . . . . .	45	40
Fountainbridge . . . . .	30	20	Keddie Park . . . . .	86	70
High School Yards . . . . .	30	19	Links Place . . . . .	32	26
High Street . . . . .	45	40	Yardheads . . . . .	64	49
Pleasance . . . . .	50	39			
Portobello . . . . .	42	35	TOTALS . . . . .	683	504
Stockbridge . . . . .	46	35			



## VENEREAL DISEASES.

REPORT BY ACTING CLINICAL MEDICAL OFFICER.

No important administrative change has taken place since the publication of the last report. The work is still for the most part carried on in the out-patient clinics at the Royal Infirmary. The accommodation for in-patients is the same as for the previous year, viz., 36 beds in the Royal Infirmary, for both sexes; 24 beds and cots in the Northern General Hospital; 14 beds and cots in Bruntsfield Hospital and Elsie Inglis Memorial Hospital; and the same number of beds and cots in the Royal Maternity Hospital; giving a total provision for in-patients of 88 beds and cots.

**New Patients.**—At the end of 1933, 3,718 patients were still under treatment and 4,242 new patients reported for examination at the various centres during 1934. The majority of these, viz., 2,725 were dealt with in the out-patient clinics at the Royal Infirmary. The number of patients under treatment during the year in all centres totalled 7,960. As in previous years the Venereal Diseases Scheme embraces the East and South East of Scotland and these numbers include patients from these outlying districts in addition to those from the City of Edinburgh itself, but the largest number of cases come from Edinburgh and the three Lothians.

Of the 2,803 new patients found to be suffering from venereal infection, the incidence of the various forms of disease was as follows:—

Syphilis . . . . .	732	...	26·1 per cent.
Gonorrhœa . . . . .	1310	...	46·8 „
Chancroid . . . . .	56	...	2·0 „
Non-Specific Venereal Disease . . . . .	705	...	25·1 „

In addition 1,439 other patients were examined and found to have conditions of the genital organs or other structures which were not directly due to venereal disease: all these patients were thoroughly tested in order completely to eliminate the possibility of venereal infection. Many of them had been treated previously for venereal disease and reported with a view to being tested for cure before marriage.

**In-Patients.**—There was again an increase in the number of patients who required admission to hospital. In the majority of these cases in-patient treatment in bed was necessary on account of the severity of the disease and of complications. Of the 1,106 patients treated in hospital as in-patients, 371 were expectant mothers admitted to the various maternity hospitals for confinement. The admissions to the various institutions were as follows:—

	Men.	Women and Children.	Total.
Royal Infirmary . . . . .	296	136	432
Municipal Hospital . . . . .	...	141	141
Bruntsfield Hospital . . . . .	...	42	42
Elsie Inglis Memorial Hospital . . . . .	...	*224	224
Royal Maternity Hospital . . . . .	...	*267	267
	296	810	1,106

\* Included in these figures are the number of children born to mothers under treatment.

### NUMBER OF BIRTHS.

Elsie Inglis Memorial Hospital . . . . .	96
The Royal Maternity Hospital . . . . .	120

**Out-Patient Attendances.**—There has been a decrease in the attendances of out-patients as compared with the previous year. This is accounted for partly by the decrease in the number of cases of syphilis who remain under treatment for prolonged periods, and also by the increase in the number of cases with non-specific venereal disease, who only require a short period of observation and treatment. For medical examination, intermediate treatment, dressings, etc., the total out-patient attendances numbered 143,001; 106,869 were made by male patients and 36,132 by women and children. The detailed attendances at the various out-patient centres are as follows :—

Royal Infirmary, Male Department . . . . .	87,789
Royal Infirmary, Female Department . . . . .	18,842
Municipal Clinics . . . . .	3,133
Bruntsfield Hospital and Dispensaries . . . . .	10,955
Royal Maternity Hospital . . . . .	3,202
Seamen's Dispensary, Leith . . . . .	19,080

At the Royal Infirmary Clinics the average daily attendances for men, women and children remain practically the same as for the previous year.

**Syphilis.**—The percentage of patients suffering from syphilis is 26.1 per cent. as compared with 27.6 per cent. for 1933. In the Royal Infirmary Clinics 12.2 per cent. suffered from congenital syphilis; in the whole scheme the total cases of congenital syphilis were 144 or 19.6 per cent. of the syphilis patients. The following-up of children of parents who are known to suffer from acquired syphilis has been continued throughout the year and has been successful in securing the attendance for tests and treatment of many children suffering from latent congenital syphilis. Through this follow-up work, which is largely carried out by the nurse attached to the department, many cases of congenital infection are discovered before their health has been impaired and treatment in these cases will ensure freedom from such complications as blindness or deafness. In order to secure the complete success of follow-up work, a revision of the present legislation would appear to be necessary. Most persons do respond to the appeal made to them and bring their children regularly to the clinics for treatment, but a small percentage refuse treatment for themselves and for their children.

There is every reason to believe that the number of cases of congenital syphilis in the community is steadily decreasing owing to the increased number of expectant mothers who receive antenatal treatment. Treatment throughout the duration of pregnancy holds out the greatest hope of preventing congenital syphilis, and if commenced during the early months will in practically every case result in the birth of a healthy child.

Through follow-up work and the spread of knowledge regarding the dangers of venereal diseases, the number of persons suffering from acquired disease who attend regularly for treatment till tested for cure is also steadily increasing and this factor contributes largely to the reduction of congenital syphilis.

**Gonorrhœa.**—The number of cases of this infection remains almost the same and still accounts for nearly half of the total number of new patients suffering from venereal infection. In the female sex the symptoms of this disease may be slight, the infected woman suffering but little pain or inconvenience. Owing to this fact there are many women who act as carriers of gonorrhœa and are potent sources of infection while at the same time they are ignorant of the fact that they suffer from an infectious and contagious disease. With the spread of knowledge regarding the dangerous nature of any form of venereal disease, however, more patients are coming for examination, and if known infected cases could be kept under control until tested for cure the incidence of this exceedingly prevalent disease would be materially lessened.

A stringent and searching test of cure is absolutely necessary in all cases of gonorrhœa, and until this is insisted upon universally a certain number of carriers will remain and continue to be a menace to the health of the community, in as much as these latent cases in adults may give rise to ophthalmia neonatorum in infants and vulvo-vaginitis in young girls.

**Chancroid.**—The number of cases of this infection is much the same as for the previous year, and constitutes a small percentage of the total. All the cases occurred in the male sex, and dock-workers and foreign seamen accounted for about half the number.

**Non-Specific Venereal Infection.**—There has been a definite increase in the number of cases falling into this group which included such conditions as non-gonorrhœal urethritis, balanitis, and non-syphilitic ulceration. While these conditions are not followed by such serious complications as are syphilis and gonorrhœa, they are capable of producing disability and loss of working efficiency and require constant observation and regular treatment ; medical examination and bacteriological and serological testing must be performed at frequent intervals in order to exclude the possibility of superadded syphilitic or gonococcal infection. Fortunately, most of the conditions classed under this heading respond rapidly and well to suitable treatment, and the patients in this group can usually be discharged after the necessary period of observation.

There is a slight increase in the total number of new patients, the greater part of this being due to an increase in cases of non-specific disease. The figures for syphilis show a slight decrease, those for gonorrhœa remaining approximately the same.

**Ophthalmia Neonatorum.**—The number of cases notified under the Public Health (Infectious Diseases) Regulations of 1932 shows an increase of 17 per cent. on the figures for the previous year ; 30 of these cases were admitted to hospital for treatment or observation. Of the total number 13 per cent. gave positive tests for gonococcal infection ; in the remaining cases other organisms were responsible for producing the condition of purulent conjunctivitis.

From areas outside Edinburgh 21 cases of suspected ophthalmia neonatorum were treated in hospital and in these cases the percentage of true gonorrhœal infection was approximately 24 per cent., so that the larger number did not show evidence of true gonorrhœal ophthalmia.



The increase in the number of cases hospitalised shows that increasing use is being made of the special accommodation provided by the Edinburgh Public Health Authority. This provision of special facilities is shared with all the Public Health Authorities on the Borders and in the Lothians by arrangement with the Edinburgh Authority. In the 51 cases which were admitted to hospital there was loss of vision in one case only ; this child was sent in from one of the Border Authorities and damage to vision had taken place some weeks previously. In no case where the child was hospitalised at once was there any loss of vision at all.

If the instructions contained in the Department of Health Memorandum of 1932 were carried out at every confinement, ophthalmia neonatorum, with its threat to the vision of the child, should be prevented in almost every case. This important aspect of preventive medicine is insisted upon in the teaching of midwives, nurses, social workers and students, and every effort is being made to secure the abolition of this disastrous infection. It is becoming more generally recognised that in every case of inflammation of the eyes of a child occurring within 21 days of birth, and therefore notifiable, both the child and mother should be removed at the earliest opportunity to the special wards provided. This procedure ensures preservation of vision for the child, eradication of the infection in the mother, and gives full opportunity for the tracing of the infection to its source.

**Vulvo-Vaginitis.**—There has been a considerable increase in the number of cases of this condition treated during the year, the figures being 41 as compared with 26 for the previous year. After careful bacteriological testing, a proportion of those cases is proved to be due to causes other than gonococcal infection ; such conditions as thread worms or infection with other organisms, for example, streptococci, staphylococci, pneumonococci, etc., may produce clinical appearances closely simulating true gonococcal vulvo-vaginitis. In all cases of this condition it is essential that the little girl be removed to hospital for thorough investigation and in order to prevent the spread of the infection to other female children. After removal of the infected child to hospital, all contacts should be carefully examined and detained in hospital if infection be proved. Spread of the condition in Children's Hospitals and in Child Welfare Departments would be minimised if all female children were carefully examined prior to admission. Insistence upon a satisfactory test of cure in adult male and female gonorrhœa would also result in a diminished incidence of these cases. In this last year two children were admitted from one family, one child with ophthalmia neonatorum, and the other with vulvo-vaginitis, and on investigation both parents were found to be carriers of gonococci.

The period required for the treatment and observation of these young girls is seldom less than six months, and entails, therefore, prolonged absence from school. In order to minimise the handicap which this loss of school attendance would mean for the child, arrangements have been set on foot to secure the services of a visiting teacher at the Northern General Hospital. There are usually in residence at this institution, including cases of this condition and also cases of interstitial keratitis due to congenital syphilis, a sufficient number of children of school age to justify the provision of a visiting teacher. In view of the serious consequences of gonococcal



gyneco-vaginitis, both from the point of view of its influence on the mind of the child, and of the serious drawback of the loss of school attendance, every effort should be made to prevent it by all preventive methods and public health procedure available, for example, prophylaxis applied to contacts and the following up of known infective cases in adults.

**Laboratory Work.**—The number of specimens examined during the year showed an increase on the previous year ; the figures being 49,265 as against 48,866. This increase in the laboratory work is accounted for by the increase in the number of new patients. Of the total number of specimens examined, 42,577 came from the venereal diseases departments in the City ; 5,154 from wards of the Royal Infirmary, and 1,534 from other institutions and general practitioners.

The repeated and long-continued tests of cure required in all forms of venereal disease accounts for the very large number of specimens sent for examination. Throughout the year close co-operation has been maintained with Dr. Logan and his staff in the Bacteriological Department of the Royal Infirmary, and the accuracy of the work done has been of invaluable assistance to the clinical workers. As in previous years Professor Mackie of the University Bacteriological Department has arranged to carry out control flocculation tests, in most cases by means of the Sachs Georgi reaction. These tests have been of very material value in securing accuracy of diagnosis. The clinical staff are one and all highly appreciative of the high degree of efficiency shown in all departments of the bacteriological work.

**Treatment.**—During the year a considerable number of new preparations have been put on the market and many of these have been given an extensive trial. Oil Soluble preparations of Bismuth such as Stabismol and Neo-Cardyl have been used in a considerable number of cases, but have not been found to differ materially in efficiency from the older suspensions of Bismuth Metal. Among the Arsenobenzol preparations, greater use has been made of the pentavalent preparation Acetylarsan, both in the treatment of adults and infants. This pentavalent arsenical is efficient therapeutically and is not followed by such severe reactions as may occur with the trivalent compounds. It has been used extensively and with great benefit in cases of syphilis in pregnant women, and for the treatment of congenital syphilitic babies. It is usually administered by intramuscular injection and is relatively painless in use. During the year many cases of neurosyphilis have been treated with malaria inoculation. In practically every case this treatment has resulted in great clinical improvement, and in many cases patients are able to return to work after their period of convalescence. We acknowledge, with gratitude, the valuable help and advice given in connection with these cases by Lieut.-Colonel E. D. W. Greig, Lecturer on Tropical Diseases in the University. Colonel Greig has carried out a regular clinical examination of all malaria cases, has instituted a system of regular reports on the number and nature of the parasites present in the blood, has advised in all cases regarding the number of rigors to be allowed, and has been consulted in all complications, for example, jaundice, cardiac weakness or hyper-excitability. The later treatment of these cases has been continued as formerly with intravenous injections of Tryparsamide along with intramuscular injections of Bismuth.

In the treatment of Gonorrhœa, a new dissolved vaccine prepared by the Glaxo Laboratories has been tried out in adult male gonorrhœa and also in vulvo-vaginitis in young girls. As a result of our testing we were able to advise the bacteriologists of the Company regarding suitable concentrations of the vaccine.

As in previous years, the use of Detoxicated Gonococcal and mixed organisms vaccine has been almost a routine measure in treatment. The rapid clearing up of the vast majority of cases, and low incidence of complications, must be to a certain extent attributed to this therapeutic measure.

Both in the Royal Infirmary, and in the Northern, Western and Eastern General Hospitals, frequent recourse has been had to consultations with other members of the various staffs. This has been found particularly valuable in affections of the eye, of the ear, nose and throat, of the skin, and of the viscera. In cases of mental abnormalities, full use has been made of the Neurological Clinic in the Royal Infirmary under the charge of Professor D. K. Henderson, and his advice has enabled us to deal satisfactorily with many cases of mental disease or deficiency.

**Results of Treatment.**—The experience of the past year has strengthened the conviction that the vast majority of cases of venereal disease are very amenable to treatment, and that in most cases the treatment provided results in complete and permanent cure. In determining the duration of treatment for both syphilis and gonorrhœa, and in insisting upon a long period of observation, care has been taken to allow a generous margin of safety in order to ensure that there shall be no recurrence or future sequelæ. During the year, 3,206 patients were discharged as cured. At the end of the year 3,507 patients were still under treatment ; 696 were transferred to other centres during the year.

**Percentage Continuing at Treatment Until Considered Cured.**—Knowledge of the long continued nature of the treatment required to achieve a cure in cases of venereal disease, especially syphilis, is becoming diffused throughout the population. Propaganda work during the year has included the showing of the film " Damaged Lives " at the Palace Picture House, Princes Street. This film was very largely attended and certainly resulted in increased and more accurate knowledge regarding the nature, manifestations, treatment and cure of venereal diseases.

The number of patients who defaulted from treatment during the year was 521, that is 18 per cent. of the venereal patients, as compared with 17·7 per cent. for the previous year ; the defaulter rate, therefore, remains substantially the same. It is gratifying to note that since 1925 there has been a steady decrease in the number of persons defaulting. In 1925, the number was 1,062, and this year it is 521, that is the number of those who cease attending before being considered cured has been reduced to a half in ten years. This satisfactory result, in the absence of legislation to compel attendance, implies increasing knowledge of the benefits to be obtained from clinic treatment, and continued and increasing confidence in the medical staff of the clinics.

**Follow-up Work.**—The exceedingly satisfactory diminution in the defaulter rate must be attributed to a considerable extent to successful follow-up work. The nurse almoner attached to the staff has succeeded in securing the return for treatment of 90 per cent. of the women and children who defaulted. In achieving such remarkable success, she has made during the year 2,411 visits to patients at their homes. In this most difficult branch of public health service, it is obvious that the visiting nurse must display in high degree such qualities as tact, understanding, helpfulness and sympathy. She must be able to find a way out of manifold difficulties and must secure the confidence and co-operation of the patients. In her work she has been continuously in touch with, and has received active assistance from other social service organisations, such as the Council of Social Service, the Society for the Prevention of Cruelty to Children, the Public Assistance Department, and the Almoners of the Royal Infirmary. We are indebted to these bodies for advice and help readily given at all times.

The question of legislation to secure greater control over known sources of infection has been continuously under consideration, and meetings and consultations have been arranged with other interested bodies such as the National Council of Women as represented by their President. This body is particularly interested in the treatment of congenital syphilitic children, and would support legislation designed to attain continuity of treatment in these cases. While such a measure would undoubtedly be useful, it is necessary to stress the primary importance of preventing congenital syphilis by the efficient treatment of adults, both male and female, and particularly of the syphilitic expectant mother.

A report has been sent to the League of Nations regarding the arrangements for the assistance, observation and after-care of prostitutes. This work of reclamation would undoubtedly be greatly assisted by the provision of suitable hostel accommodation in which young infected women could reside and be supervised while continuing to attend for treatment. Our nurse almoner is strongly of the opinion that, if an attractive alternative were offered to them, about 50 per cent. at least of all the young girls at present on the streets would avail themselves of a chance to escape from their present degrading conditions of life.

**Seamen's Dispensary, Leith.**—The number of patients taking advantage of the facilities provided for them at this dispensary has remained approximately the same, both in regard to the number of new patients and the number of those attending for treatment. It is undoubtedly a great advantage for both British and Foreign seamen to have a treatment centre of ready access in close proximity to the docks. The provision of these Seamen's Dispensaries in the various seaports throughout the country exercises a most beneficial influence in diminishing the incidence and severity of venereal diseases in this class of patient.

A statistical report regarding the nationality of the seamen attending the dispensary, and the provision made for continuity of treatment by transfer documents, etc., was sent to the Secretary-General of the British Social Hygiene Council, Chairman of the Ports Commission of the "Union Internationale Contre le Péril Vénérien" for the information of a Commission sitting at Madrid to survey the working of the "Brussels Agreement."



**Statistical Tables.**—A series of tables appended to this report show in tabular form the work of the department during the year.

**Medical, Nursing and Clerical Staff.**—I desire to pay tribute to the efficient work and effective co-operation of all members of the medical, nursing and clerical staffs. Many factors have contributed to make the year a more than usually trying and difficult one, and the continued success of the department is a testimony to the quality of the work done.

The new buildings now fast approaching completion will afford a much needed and long anticipated improvement in working conditions and treatment facilities, and the additional amenities should succeed in attracting still larger numbers of patients and in ensuring the continuation of the gratifying decrease in the defaulter rate.

The results noted could not have been achieved without consistent co-operation and team work throughout the department.



# EDINBURGH CORPORATION VENEREAL DISEASES SCHEME.

## ROYAL INFIRMARY CLINIC.

REPORT FOR THE YEAR ENDING 31ST DECEMBER, 1934.

Number of New Cases Attending :—

	EDINBURGH.		OTHER AREAS IN SCHEME.		OTHER AREAS OUTSIDE SCHEME.		AREAS OUTSIDE SCOTLAND.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
January . . .	146	51	21	10	15	8	5	1
February . . .	117	52	18	11	14	8	1	...
March . . .	104	49	21	9	18	6	1	...
April . . .	119	43	31	4	25	14	...	...
May . . .	155	41	25	10	19	10	1	...
June . . .	119	41	20	7	10	6	2	3
July . . .	103	50	18	5	21	7	6	...
August . . .	120	61	20	15	23	12	5	...
September . . .	130	39	28	13	14	8	4	1
October . . .	121	54	23	8	15	7	1	...
November . . .	112	37	26	8	16	8	1	...
December . . .	115	32	27	2	12	4	2	...
Totals . . .	1,461	550=2,011	278	102=380	202	98=300	29	5=34

EDINBURGH . . . . .	2,011
Other Areas in Scheme . . . . .	380
Other Areas outside Scheme . . . . .	300
Areas outside Scotland . . . . .	34
Grand Total . . . . .	<u>2,725</u>

Of the New Cases Attending there were :—

## EDINBURGH.

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
January .	19	62	6	25	34	17	6	12	16	
February .	19	48	3	13	34	9	13	8	22	
March .	15	43	3	13	30	11	15	9	14	
April .	25	46	2	22	24	10	1	17	15	
May .	26	51	4	33	41	12	8	9	12	
June .	13	45	2	21	38	5	10	8	18	
July .	8	53	2	14	26	7	16	7	20	
August .	11	48	3	18	40	19	15	11	16	
September	24	62	3	18	23	12	10	10	7	
October .	19	47	1	22	32	6	7	22	19	
November .	13	44	2	13	40	13	10	9	5	
December .	13	59	2	23	18	8	9	11	4	
Totals	205	608	33	235	380	129	120	133	168	

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
January .	2	11	1	2	5	2	2	4	2	
February .	3	7	...	1	7	3	1	1	6	
March .	2	10	1	2	6	2	5	2	...	
April .	4	15	1	7	4	2	...	2	...	
May .	5	10	1	6	3	1	3	3	3	
June .	4	13	...	3	...	4	1	2	...	
July .	3	9	...	4	2	3	1	...	1	
August .	1	10	...	3	6	3	3	5	4	
September .	4	11	1	6	6	4	4	2	3	
October .	1	8	1	9	4	1	...	3	4	
November .	6	10	...	5	5	...	...	3	5	
December .	2	14	4	2	5	1	...	1	...	
Totals	37	128	10	50	53	26	20	28	28	

### OTHER AREAS OUTSIDE SCHEME.

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
January .	7	5	...	2	1	...	1	5	2	
February .	7	...	...	4	3	2	1	3	2	
March .	6	5	...	1	6	3	1	2	...	
April .	8	3	...	3	11	2	3	8	1	
May .	5	3	...	3	8	3	2	2	3	
June .	3	2	...	3	2	2	1	2	1	
July .	5	10	...	5	1	3	1	2	1	
August .	5	14	...	2	2	3	2	3	4	
September	4	4	...	3	3	1	3	2	2	
October .	8	3	1	...	3	1	1	1	4	
November .	6	3	...	4	3	2	...	1	5	
December .	5	3	...	1	3	...	1	3	...	
Totals	69	55	1	31	46	22	17	34	25	

### AREAS OUTSIDE SCOTLAND.

[illegible]

## AGE PERIODS.

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
Under 1 yr.	...	...	...	...	...	2	1	...	18	
1-4 yrs.	...	...	...	1	...	5	4	1	22	
5-14 yrs.	8	...	...	1	6	9	6	8	50	
15-24 yrs.	56	245	10	75	111	39	70	91	53	
25 yrs. up	257	555	34	242	369	124	76	96	80	
Totals	321	800	44	319	486	179	157	196	223	

## Admissions to Hospital :—

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
Edinburgh	45	81	6	40	2	46	22	6	1	
Other Areas in Scheme	16	43	3	9	1	18	3	6	...	
Areas outside Scheme .	17	20	...	6	...	16	9	7	...	
Areas outside Scotland	1	3	...	1	2	2	...	...	...	
Totals	79	147	9	56	5	82	34	19	1	
	296					136				

## Discharges from Hospital :—

	MALES.					FEMALES.				
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.	
Edinburgh .	50	80	4	37	2	48	22	7	2	
Other Areas in Scheme	15	40	4	7	1	17	6	5	...	
Areas outside Scheme .	19	15	...	9	...	13	7	9	...	
Areas outside Scotland	2	3	...	1	2	2	...	...	...	
Totals	86	138	8	54	5	80	35	21	2	
	291					138				

## SPECIAL TREATMENT ADMINISTERED.

Number of Intravenous and Intramuscular Injections given :—

	Neokharsivan.	Sulfarsenol.	Bismuth.	Other Drugs.	Total.
January . . .	499	259	1,050	1,070	2,876
February . . .	527	382	1,355	703	2,967
March . . .	550	425	1,412	851	3,238
April . . .	474	365	1,343	755	2,937
May . . .	508	411	1,467	958	3,344
June . . .	443	355	1,269	866	2,933
July . . .	416	405	1,261	837	2,919
August . . .	443	310	1,226	999	2,978
September . . .	411	433	1,235	937	3,016
October . . .	414	443	1,353	955	3,165
November . . .	393	402	1,421	848	3,064
December . . .	307	276	1,271	917	2,771
Totals . . .	5,385	4,466	15,663	10,696	36,210

## PATHOLOGICAL WORK.

Number of Specimens examined :—

	Wass.	C.S.F.	G.C.F.T.	D.Gs.	Smears.	Others.	Total.
January . . .	1,141	36	383	58	992	617	3,227
February . . .	823	40	336	58	1,076	476	2,809
March . . .	983	29	333	48	997	101	2,492
April . . .	879	23	328	40	870	66	2,206
May . . .	983	32	370	64	818	28	2,295
June . . .	826	15	288	20	783	17	1,949
July . . .	823	29	288	14	839	24	2,017
August . . .	844	39	295	18	906	25	2,127
September . . .	873	37	301	36	790	28	2,065
October . . .	811	31	313	38	848	31	2,072
November . . .	894	28	385	8	949	45	2,309
December . . .	800	34	398	27	948	47	2,254
Totals . . .	10,680	373	4,018	429	10,816	1,505	27,821

Total Attendances at the Clinic for Routine Dressings, etc. :—

	Males.	Females.	Total.
January . . .	7,763	1,463	9,226
February . . .	7,193	1,948	9,141
March . . .	7,578	1,834	9,412
April . . .	7,077	1,820	8,897
May . . .	7,912	1,798	9,710
June . . .	6,793	1,533	8,326
July . . .	7,046	1,390	8,436
August . . .	7,506	1,504	9,010
September . . .	6,903	1,451	8,354
October . . .	7,178	1,438	8,616
November . . .	7,242	1,475	8,720
December . . .	7,598	1,185	8,783
Totals . . .	87,789	18,842	106,631



## OTHER TREATMENT CENTRES IN EDINBURGH.

## 1. Subsidiary Centres for Royal Infirmary.

Number of New Cases . . . . . 247

Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
64	80	4	99 = 247

Number of Patients treated in Hospital . . . . . 141

Total Attendances of Out-patients . . . . . 3,133

Pathological Work—Number of specimens examined . . . . . 1,453

Special Treatment administered—Number of Injections given . . . . . 3,716

## 2. Hospital for Women and Children and Subsidiary Centres.

Number of New Cases . . . . . 486

Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
57	47	155	227 = 486

Number of Patients treated in Hospital . . . . . 266

Total Attendances of Out-patients . . . . . 10,955

Pathological Work—Number of specimens examined . . . . . 7,160

Special Treatment administered—Number of Injections given . . . . . 1,763

## 3. Royal Maternity Hospital.

Number of New Cases . . . . . 463

Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
52	91	6	314 = 463

Number of Patients treated in Hospital . . . . . 267

Total Attendances of Out-patients . . . . . 3,202

Pathological Work—Number of Specimens examined . . . . . 3,170

Special Treatment administered—Number of Injections given . . . . . 422

## 4. Seamen's Dispensary, Leith.

Number of New Cases . . . . . 321

Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.
59	135	12	25	90 = 321

Total Attendances of Out-patients . . . . . 19,080

Pathological Work—Number of Specimens examined . . . . . 1,854

Special Treatment administered—Number of Injections given . . . . . 1,691

# MUNICIPAL GENERAL HOSPITALS.

REPORT BY MEDICAL SUPERINTENDENT OF HOSPITALS.

The following is a report of the work carried out in the Municipal General Hospital for the year 1934. The year has again been one of steady progress.

In the Western General Hospital, the number of cases treated in 1932 was 1,689 in 1933 the total number was 2,183 and for 1934 the number treated was 2,673. This hospital was reserved for the treatment of surgical, maternity, acute medical cases and children. Of the patients treated, 35 per cent. were children.

A comparison of the statistics for the last three years for the surgical and maternity departments gives an indication of the steady increase in the work done. The general surgical operations performed at the Western General Hospital in 1932 were 87, in 1933 the number was 517, and in 1934 the figure rose to 887. The maternity department treated 89 patients in 1932, in 1933 there were 181 patients treated and 241 were treated in that department in 1934. In the X-ray department for five months in 1932 the number of examinations was 240, in 1933 the total examinations were 314 and for eleven months in 1934 the number was 1,167.

Along with the increase in the total patients treated, the standard of treatment has also been raised. Two additional assistant physicians have been appointed and the nursing staff has been increased by the addition of a sister tutor, a theatre sister, an X-ray sister, a night sister, three staff nurses, and nineteen probationer nurses.

In the year 1932 arrangements were made for the bacteriological services of the Municipal General Hospitals to be carried out by the Bacteriology Department of the University. Such services include the examination of sputum, faeces, urine, blood, cerebro-spinal fluid, throat swabs, pus or other material by smears or cultures. Several thousands of such specimens were examined during the year. By this routine work the germs causing the diseases have been reported on and an exact diagnosis facilitated. In addition, help has been given by this department with special investigations, e.g., research work on genito-urinary tuberculosis carried out in collaboration with one of the assistant surgeons on the staff of the hospitals.

A biochemist has been appointed. Qualitative and quantitative chemical examinations of blood, urine, stomach contents and other fluids have been carried out in the municipal section of the Edinburgh University Biochemical Laboratory; 1,690 examinations have been made during 11 months of the year. These examinations have been most valuable with regard to diagnosis and treatment of patients in the hospitals.

Pathological investigations have been numerous. In almost every case where material has been removed by operation, an examination of the tissue has been carried out.

In the Western General Hospital, where 267 persons died, 88 post mortem examinations were made, 55 examinations were carried out at the Eastern General Hospital, where there were 469 deaths, and 10 examinations were made at the Northern

General Hospital, in which hospital there were 125 deaths. This gives an autopsy rate of 17 per cent.

On the surgical side the greatest number of patients sought treatment for diseases or conditions of the abdominal organs, and next in number were cases with affections of bones and joints. Medical cases were chiefly diseases of the respiratory, circulatory and nervous systems.

Children were mostly treated for skin diseases, infectious and parasitic diseases, diseases affecting nutrition and respiratory disorders in the order named. Almost one-third of the children admitted were more or less healthy "convenience" cases; 141 children were surgical cases, 656 were medical cases and 161 were newly-born babies.

The average number of healthy children resident in the Children's Home was 73 as compared with 75, the average for 1933. Fewer children were boarded out during the year.

The number of cases treated in the Eastern and Northern General Hospitals was a little less than in the previous year. These patients were chiefly chronic medical cases. Fewer patients were treated in the sick ward of Craiglockhart Institution, but more out-patients were treated.

Beds in the paying wards are still being very much appreciated and are sometimes too few in number to meet the demand.

The hostel for twelve resident students from the University is greatly appreciated. This scheme for the training of undergraduates for a period of three months at a time in subjects of their University curriculum is proving so successful that the directors of the hospital units suggest that accommodation for forty students should be provided. As well as resident students, other undergraduates attended at the hospital classes when bedside clinics were given, and graduates also found the teaching available to them of very great value.

Gifts of fruit and flowers and letters of thanks have been received as expressions of appreciation of the treatment given in each of the hospitals. The hospitals are indebted to the many kind friends who have provided concerts, given "outings" to convalescent patients in motor cars or wheel chairs, "airings" to babies, sent gifts of books and toys, or in other ways provided treats or entertainment for the patients.

All the members of the staffs of the hospitals have carried out their duties in a very satisfactory manner, and have given zealous service, sometimes under very trying conditions. Sickness has not been exceptional this year amongst the staffs of any of the hospitals. Several nurses have been acutely ill, and the loss of the sick ward for nurses at the Western General Hospital, which was taken for nurses' quarters to accommodate the increased numbers of staff, has been very evident. Cases of severe illness amongst the staffs of any of the hospitals are removed to the Western General Hospital, if operation or other specialised treatment is indicated. There is usually a constant weekly sick rate of about 5 per cent. amongst the probationer nurses, and 2 per cent. amongst domestic staff.

## WESTERN GENERAL HOSPITAL.

There were no structural alterations during the year.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1934.

		Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Adults	{ Males . . .	71	695	575	122	69
	{ Females . . .	62	887	789	97	63
Children	{ Males . . .	64	429	423	20	50
	{ Females . . .	57	408	380	28	57
Totals . . . . .		254	2,419	2,167	267	239

Number of Cases treated . . . . . 2,673.

TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured . . . . .	1,433	Not Improved . . . . .	256
Improved . . . . .	478	Died . . . . .	267
Remaining under treatment . . . . .			239

## CAUSES OF DEATH.

	Adults.		Children.	
	Males.	Females.	Boys.	Girls.
1. Infectious and Parasitic Diseases . . . . .	...	2	1	1
2. Cancer and Other Tumours . . . . .	31	21	...	...
3. Rheumatism, Diseases of Nutrition and other General Diseases . . . . .	...	...	...	...
4. Diseases of the Blood and Blood-forming Organs	11	6	...	...
5. Diseases of Nervous System and Sense Organs	14	14	1	5
6. Diseases of Circulatory System . . . . .	12	17	...	2
7. Diseases of Respiratory System . . . . .	16	8	6	3
8. Diseases of Digestive System . . . . .	10	12	5	10
9. Non-Venereal Diseases of Genito-Urinary System	23	11	...	...
10. Diseases of Skin and Cellular Tissue . . . . .	1	1	...	...
11. Diseases of Bones and Organs of Locomotion .	2	3	...	...
12. Congenital Malformations . . . . .	...	...	2	2
13. Diseases of Early Infancy . . . . .	...	...	5	5
14. Senility . . . . .	2	...	...	...
15. Primary Cardiac Failure and Surgical Trauma .	...	1	...	...
16. Pregnancy and Childbirth . . . . .	...	1	...	...
	<u>122</u>	<u>97</u>	<u>20</u>	<u>28</u>

Total Beds . . . . .	300
Average number of Occupied Beds . . . . .	241
Average length of stay, in days, per patient	36
Highest daily number of patients . . . . .	268 on 7.1.34
Lowest " " " " " . . . . .	200 on 27.8.34



## SPECIAL DEPARTMENTS.

## SURGERY.

During the year 887 operations were performed ; 544 of these were major operations and 343 minor operations. A general anæsthetic was administered in 659 operations, 48 operations were carried out with a spinal anæsthetic, and 133 operations were performed under local anæsthesia.

## CLASSIFICATION OF OPERATIONS.

Operation on brain, spinal cord, and peripheral nerves . . . . .	12
„ lymph glands . . . . .	22
„ upper air and food passages . . . . .	58
„ breast and thorax . . . . .	100
„ abdomen . . . . .	285
„ genito-urinary organs . . . . .	110
„ bones and joints (including amputation) . . . . .	118
Various unclassified operations . . . . .	182
	<hr/>
	887

## CLASSIFICATION OF CASES.

Diseases of brain, spinal cord and peripheral nerves . . . . .	12
„ lymph glands . . . . .	22
„ blood vessels (including Gangrene) . . . . .	32
„ tongue and jaws, upper air and food passages . . . . .	59
„ breast . . . . .	77
„ thorax . . . . .	75
„ abdominal organs . . . . .	259
„ urinary and genital organs . . . . .	130
„ female pelvic organs . . . . .	28
„ bones and joints . . . . .	156
„ skin and cellular tissue . . . . .	74
Primary cardiac failure and surgical trauma . . . . .	4
Various unclassified diseases . . . . .	21
	<hr/>
	949

## EAR, NOSE AND THROAT DEPARTMENT.

Total number of patients, 122.

62 patients were treated in addition to 60 tonsils and adenoids cases.

54 operations, of which 47 required a general anæsthetic and 7 a local anæsthetic.

## EYE DEPARTMENT.

Total number of patients, 28.

14 patients were treated, and 2 were operated on under a general anæsthetic.

In addition the eye specialist gave advice on patients being treated in the general wards of the hospitals.

## DENTAL DEPARTMENT.

Number of patients treated, adults 146 ; children 61	207
„ treatments requiring a general anæsthetic	228
„ treatments requiring a local anæsthetic	2
„ extractions	200
Other dental work	7
Number of extractions requiring no anæsthetic	3

The above includes cases from the Children's Home. Three additional attendances were made for patients at the Northern General Hospital.

## X-RAY DEPARTMENT.

The total patients examined during the year was 1,167, entailing sometimes more than one examination per patient.

Barium meals and enemata	151
Pyelograms	70
Gall-bladder examinations	22

## MATERNITY DEPARTMENT.

Number of cases treated	241
„ „ admitted (includes 11 babies with mothers)	225
„ „ discharged	199
„ „ delivered (146 normal, 14 abnormal)	160
„ post-partum puerperal admissions	12
„ deaths—Mothers 1, Infants 9	10

There have been 2 ante-natal cases admitted during the year from the Royal Maternity and Simpson Memorial Hospital. The abnormal deliveries included 5 by forceps, and 7 cæsarian section. The other two were abnormal presentations; total 14. There were no cases of puerperal sepsis or puerperal pyrexia.

## SPECIAL DIET DEPARTMENT.

Cases treated by Special Diet during the year	70
Remaining at 1st January, 1934	13
Number of cases admitted	57
„ „ discharged	53
„ „ died	8
„ „ remaining at 31st December, 1934	9

The disabilities treated included the following :—

Diabetes	41 per cent. of cases.
Stomach	26 „ „
Kidney disorders	20 „ „
Blood diseases	7 „ „
Obesity	6 „ „

Of the patients treated by special diet, 10 per cent. were cured, 66 per cent. improved, and in 24 per cent. of the cases the condition remained stationary.

DISEASES AND CONDITIONS OF MEDICAL CASES TREATED IN THE  
WESTERN GENERAL HOSPITAL.

	<i>Adults.</i>
1. Infectious and parasitic diseases . . . . .	2
2. Cancer and other tumours . . . . .	25
3. Rheumatism, Diseases of nutrition and other general diseases . . . . .	77
4. Diseases of the blood and blood-forming organs .	22
5. Diseases of nervous system and sense organs . .	92
6. Diseases of circulatory system . . . . .	99
7. Diseases of Respiratory system . . . . .	138
8. Diseases of digestive system . . . . .	75
9. Non-venereal diseases of genito-urinary system .	62
10. Diseases of skin and cellular tissue . . . . .	3
11. Diseases of bones and organs of locomotion . .	39
12. Senility . . . . .	9
13. Non-classified conditions . . . . .	41
	<hr/> 684 <hr/>

MASSAGE AND ELECTRO-THERAPY DEPARTMENT.

The total number of patients treated during the year was 292, of which 161 were cured and improved, 121 not improved, and 10 remained under treatment. During the year 2,182 treatments were given, as follows :—

Massage . . . . .	1056	Ultra Violet Artificial Sun	
Galvanism and Faradism . . . . .	93	light . . . . .	275
Diathermy . . . . .	272	Re-Educational Exercises . . . . .	443
Radiant Heat . . . . .	17	Sinusoidal . . . . .	26

NORTHERN GENERAL HOSPITAL.

There were no structural alterations during the year.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1934.

	Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Adults . . . . .	263	287	207	125	218
Children . . . . .	...	45	40	...	5
Totals . . . . .	263	332	247	125	223

Number of cases treated . . . . . 595.

## TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured . . . . .	85	Not Improved . . . . .	37
Improved . . . . .	125	Died . . . . .	125
Remaining under treatment . . . . .			223.

## CAUSES OF DEATH.

	<i>Adults.</i>
1. Cancer and other Tumours . . . . .	5
2. Diseases of the Blood and Blood-forming Organs . . . . .	9
3. Diseases of Nervous System and Sense Organs . . . . .	21
4. Diseases of Circulatory System . . . . .	42
5. Diseases of Respiratory System . . . . .	47
6. Diseases of Digestive System . . . . .	1
	<hr/> 125 <hr/>

Total Beds . . . . .	260
Average number of occupied beds . . . . .	212
Average length of stay, in days, per patient . . . . .	233
Highest daily number of patients . . . . .	263 on 1.1.34
Lowest daily number of patients . . . . .	197 on 3.8.34

(Additional beds were put up in wards temporarily at beginning of the year to relieve the City Hospital.)

## EASTERN GENERAL HOSPITAL.

There were no structural alterations during the year.

## STATISTICS FOR THE YEAR FROM 1ST JANUARY TO 31ST DECEMBER, 1934.

	Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Males . . . . .	202	1,366	1,101	263	204
Females . . . . .	145	937	715	206	161
Totals . . . . .	347	2,303	1,816	469	365

Number of Cases treated . . . . . 2,650

## TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured . . . . .	194	Not Improved . . . . .	386
Improved . . . . .	1,236	Died . . . . .	469
Remaining Under Treatment . . . . .			365



## CAUSES OF DEATH.

	<i>Males.</i>	<i>Females.</i>
1. Infectious and Parasitic Diseases . . . . .	12	10
2. Cancer and Other Tumours . . . . .	46	32
3. Rheumatism, Diseases of Nutrition and other General Diseases . . . . .	2	3
4. Diseases of the Blood and Blood-forming Organs . . . . .	1	2
5. Diseases of Nervous System and Sense Organs . . . . .	60	47
6. Diseases of Circulatory System . . . . .	54	52
7. Diseases of Respiratory System . . . . .	43	15
8. Diseases of Digestive System . . . . .	7	5
9. Non-Venereal Diseases of Genito-Urinary System . . . . .	13	8
10. Diseases of Skin and Cellular Tissue . . . . .	...	2
11. Senility . . . . .	21	23
12. Deaths from Violence . . . . .	4	7
	<hr/> 263	<hr/> 206
	<hr/>	<hr/>

Total Beds . . . . .	400
Average number of Occupied Beds . . . . .	370
Average length of stay, in days, per patient . . . . .	59
Highest daily number of patients . . . . .	396 on 9.4.34
Lowest        "        "        " . . . . .	345 on 1.1.34

## CLASSIFICATION OF CASES TREATED.

1. Infectious and Parasitic Diseases . . . . .	78
2. Cancer and other Tumours . . . . .	115
3. Rheumatism, Diseases of Nutrition and other General Diseases . . . . .	204
4. Diseases of the Blood and Blood-forming Organs . . . . .	21
5. Diseases of Nervous System and Sense Organs . . . . .	446
6. Diseases of Circulatory System . . . . .	328
7. Diseases of Respiratory System . . . . .	338
8. Diseases of Digestive System . . . . .	194
9. Non-Venereal Diseases of Genito-Urinary System . . . . .	112
10. Diseases of Pregnancy and Child Birth . . . . .	8
11. Diseases of Skin and Cellular Tissue . . . . .	157
12. Diseases of Bones and Organs of Locomotion . . . . .	74
13. Congenital Malformations . . . . .	4
14. Senility . . . . .	135
15. Accidents and Violence . . . . .	89
	<hr/> 2,303
	<hr/>

These patients were chiefly medical cases or chronic surgical. In the course of treatment, 259 minor surgical operations were performed; 38 ear, nose and throat cases were treated, 14 cases received eye treatment and 79 received dental treatment. Special diet was given to 58 patients, chiefly for diabetes.

#### MASSAGE DEPARTMENT.

The total number of patients treated during the year was 210, of which 76 were improved and 134 not improved.

During the year, 1,099 treatments were given, as follows :—

Massage . . . .	805	Ionization . . . .	4
Galvanism . . . .	51	Ultra Violet Rays . . . .	48
Faradism . . . .	30	Remedial Exercises . . . .	161

#### CRAIGLOCKHART INSTITUTION.

##### SICK WARDS.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1934.

	Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Males . . . . .	7	462	465	...	4
Females . . . . .	4	205	204	3	2
Totals . . . . .	11	667	669	3	6

Number of Cases treated . . . . . 678

Of the patients discharged, 273 males and 133 females went back to the Main House.

In the out-patient department of this institution, 4,240 males and 1,988 females received treatment. The chief disabilities were chronic ulcers, otorrhœa, conjunctivitis, sore feet (corns and bunions), dyspepsia, chill.

During the year, 192 patients were supplied with spectacles.

An examination of all inmates in the institution was made every quarter.

There were 31 ante-natal cases in the institution during the year.

The number of mental defectives (under guardianship) was 3 males and 2 females.

There were no epidemics amongst the inmates during the year.

**CRAIGLEITH CHILDREN'S HOME.**

During the year from 1st January to 31st December, 1934, on an average, 73 children were resident in the Children's Home.

The greatest number of children in the Home at one time was 103 on 24th December, 1934, and the lowest number was 52 on the 7th April, 1934. The number of toddlers was about 49 per cent. of the total number of children admitted to the Home during the year.

Forty-four children were sent to country board—forty-two less than the figure for the previous year.

Apart from several cases of ringworm of the scalp, the health of the children was good.

# MENTAL HEALTH SERVICES.

## BANGOUR MENTAL HOSPITAL.

### REPORT BY MEDICAL SUPERINTENDENT.

**General Statistics.**—The following table sets forth the changes in the population of the hospital during the year :—

	M.	F.	Total.	M.	F.	Total.
In Hospital, 1st January, 1934 . . . . .	480	534	1,014			
Absent on Probation . . . . .	3	3	6			
Absent on Pass . . . . .	10	1	11			
Total on Register (including 106 voluntary) . . . . .				493	538	1,031
First Admissions . . . . .	117	120	237			
Re-admissions . . . . .	44	38	82			
Total cases admitted during the year . . . . .				161	158	319
Total cases under care . . . . .				654	696	1,350
Cases discharged (including 90 voluntary)						
Recovered . . . . .	78	72	150			
Relieved . . . . .	26	21	47			
Not improved . . . . .	5	6	11			
Died . . . . .	26	57	83			
Total cases discharged and died during the year . . . . .				135	156	291
Remaining in the Hospital on 31st December, 1934 . . . . .	512	536	1,048			
Absent on Probation . . . . .	2	2	4			
Absent on Pass . . . . .	5	2	7			
Total on Register (including 99 voluntary) . . . . .				519	540	1,059
Average daily number on Register during the year . . . . .				504	537	1,041

**Admissions.**—The number of admissions, namely, 319, is 35 less than the corresponding figure for 1933. It will be noted that one-third of the admissions (106) entered the hospital voluntarily. This represents a slight increase on the previous year's proportion. Even so, the figure still falls short of what it ought to be. There is little doubt that certification is resorted to far too readily. Many patients, though technically insane, are quite capable of appreciating what is involved in placing themselves under care in a mental hospital, and should be given the chance of doing so before certification is invoked.

Among the admissions, two features have been prominent. First, the number of aged admissions shows no sign of diminishing. The explanation of this lies probably in the fact that, with advances in medical science generally and improved standards of hygiene, the normal expectation of life is rising. Consequently, the population on the whole is an older population and more people are exposed to the risk of senile degenerative conditions than formerly. These victims of senile decay throw a heavy and ever increasing burden on the resources of the mental hospital. In many instances, no doubt, the mental hospital is the only refuge of such cases; but some mode of providing for them other than compulsory detention under a Sheriff's Order might be devised.



The second arresting feature is the high proportion of admissions suffering from what is popularly known as "a nervous breakdown." There seems little reason to doubt that the tempo of modern life, combined with the prevalence of a sense of insecurity in relation to employment and kindred matters, is too much for many people. Fortunately, the outlook in such cases, where the precipitating factors are definitely known and can be dealt with, is uniformly good. In the year under review over 70 per cent. of such cases were restored to health. While that is so, the seriousness of these conditions should not be underestimated. In a number of instances the risk of suicide constitutes a grave menace which is all too often ignored. In practically every such case the picture is complicated by definite physical disorders of the nature of fatigue and exhaustion. These facts are reflected in the following figures :—

### Suicides.

	Male.	Female.	Total
Contemplated . . . . .	17	14	31
Attempted by :—			
Gas . . . . .	3	4	7
Drowning . . . . .	3	...	3
Hanging . . . . .	1	...	1
Strangulation . . . . .	1	...	1
Cut-throat . . . . .	5	2	7
Poisoning . . . . .	3	...	3
Precipitation . . . . .	4	3	7

### Physical Condition on Admission.

	Male.	Female.	Total.
Average . . . . .	64	48	112
Poor . . . . .	82	95	177
Very Weak or Exhausted . . . . .	15	15	30
Totals . . . . .	161	158	319

**Causation.**—The cause of a mental breakdown is usually a tangled skein of events. In the following table an attempt has been made to isolate some of the precipitating factors.

### Causes of Mental Disorder.

	Number of Instances.		
	Male.	Female.	Total.
Heredity . . . . .	12	65	77
Adolescence . . . . .	18	17	35
Climacteric . . . . .	...	23	23
Parturition and Puerperal State . . . . .	...	8	8
Venereal Disease . . . . .	13	6	19
Epilepsy . . . . .	8	3	11
Arterio-Sclerosis . . . . .	12	22	34
Influenza . . . . .	1	...	1
Encephalitis Lethargica . . . . .	6	...	6
Cerebral Disease . . . . .	3	2	5
Other Bodily Diseases . . . . .	9	10	19
Alcohol . . . . .	19	8	27
Worry, Anxiety, and Adverse Circumstances	73	87	160
Congenital . . . . .	12	9	21
Unknown . . . . .	9	6	15

**Discharges.**—The total number of discharges during the year was 208. Calculate on the number of admissions, the percentage of recoveries was 47 as compared with 42·3 and 45·8 for the two immediately preceding years. In addition to those discharged recovered, 47 others were so far improved as to be able to live at home without risk to themselves or to others.

**Deaths.**—The deaths totalled 83. None of them presented unusual features.

The causes of death are indicated below:—

### *Causes of Death.*

#### **General Diseases.**

	Male.	Female.	Total.
Tuberculosis of Lungs . . . . .	2	3	5
Tuberculosis of Peritoneum . . . . .	...	1	1
Tuberculosis of Joints . . . . .	...	1	1
Pernicious Anæmia . . . . .	...	1	1
Toxæmia from Acute Parotitis . . . . .	...	1	1
Septicæmia . . . . .	1	...	1
Gangrene of Foot . . . . .	...	1	1
Malignant Disease of Thyroid Gland . . . . .	...	1	1
Malignant Disease of Vagina . . . . .	...	1	1
Malignant Disease of Larynx . . . . .	...	1	1

#### **Diseases of the Nervous System.**

	Male.	Female.	Total.
General Paralysis . . . . .	3	1	4
Cerebral Hæmorrhage . . . . .	4	6	10
Cerebral Thrombosis and Embolism . . . . .	2	10	12
Epilepsy . . . . .	2	2	4

#### **Diseases of the Cardio-Vascular System.**

	Male.	Female.	Total.
Myocardial Degeneration . . . . .	3	10	13
Hypertrophy and Dilatation of Heart . . . . .	2	1	3
Valvular Disease of Heart . . . . .	...	2	2
Acute Dilatation of Heart . . . . .	...	2	2
Arterio-sclerosis . . . . .	4	8	12

#### **Diseases of the Respiratory System.**

	Male.	Female.	Total.
Lobar Pneumonia . . . . .	...	2	2
Broncho-pneumonia . . . . .	1	1	2

#### **Diseases of the Alimentary System.**

	Male.	Female.	Total.
Acute Gastro-Enteritis . . . . .	2	...	2

#### **Diseases of the Genito-Urinary System.**

	Male.	Female.	Total.
Chronic Nephritis . . . . .	...	1	1

### HOSPITAL DEVELOPMENT.

**Nurses' Home.**—A much-needed addition to the resources of the hospital was made by the completion of the extension to the nurses' home. Till now the nursing staff has been housed partly in the nurses' home and partly in the various villas scattered

throughout the hospital, while a few others were lodged in anything but satisfactory conditions outside. The extension provides 68 additional bedrooms and ensures that every nurse has her own private room. Besides this, ample common-room accommodation has been provided. There are separate dining-rooms for assistant matrons, charge nurses, nurses and maids, as well as recreation and reading rooms. The training of the nurses in their professional work has not been overlooked. There is a most suitable lecture room, fitted with individual desks and also a practical room, study and sister tutor's office. Other amenities are the shampoo rooms and the miniature laundry.

The opening ceremony was performed by the Lady Provost on 3rd December, in the presence of a large audience who afterwards had an opportunity of inspecting the Home.

The new home has set free a certain amount of accommodation for the use of patients, many of whom highly appreciate the privacy of a private bedroom. It has also been possible to centralise the cooking of the nurses' meals and to give them their food with a degree of privacy and comfort which was wanting in the wards. The issuing of stores has likewise been simplified.

**Temporary Buildings.**—Ward 23 has been re-constructed and is now occupied. Good progress is being made with a similar transformation in the case of Ward 27. There still remains Ward 25 to be so dealt with.

**Centre Verandahs.**—What was formerly the special treatment block (dentistry, auricular surgery, X-ray, etc.) has now been reconstructed and turned into a ward for 20 patients. Accommodation for an additional 20 has been furnished by adding two closed verandahs. This unit is now about to be occupied by the patients at present housed in the centre verandahs. These, which fall far short of modern hospital standards, are to be removed.

The work formerly done in the special treatment department is still being carried on as vigorously and more conveniently in the massage department.

**Massage Department.**—This is one of the busiest departments in the hospital. Here hydro-therapy, electro-therapy, occupation-therapy, artificial sunlight, and massage are in daily use. The department also provides for dentistry, minor surgery and chiropody. On the average, 600 treatments are given per month. Within the last few months, a new experiment in the form of swedish drill and simple gymnastics has been tried out. The main object has been to arrest the apparently inevitable decay of initiative and will-power in young persons suffering from dementia praecox. So marked is this pathetic feature that the patients suffering from this disease become quite statuesque in their immobility and inertia. The drill class shows promise of helping to ward off this phenomenon.

**Centre Block.**—New accesses to the two wards in this block have been provided. These open directly into suites of reception rooms where the patient, on admission, can be examined most conveniently, both mentally and physically.

**Central Heating.**—The scheme of central heating for the centre block, the church, the hospital and wards 32, 7, and 8 has been completed and is giving satisfactory service.

**Transport.**—Two motor lorries were acquired during the year for transport work inside the grounds. This has meant considerable economy in time and labour and has proved altogether most satisfactory.

**Grounds.**—The new bowling green has proved a great asset alike to patients and to staff. The opening ceremony took the form of a match between the Corporation Bowling Club and Bangour Bowling Club, resulting in a win for the latter. Mr Morison Millar has kindly gifted a silver cup—The Morison Millar Trophy—to be awarded annually for the Club Championship.

Good progress is being made with laying out the sports arena and also the nurses' garden in association with the new home.

**Staff.**—The only important change in the personnel of the staff resulted from the appointment of Miss Titterington, Assistant Matron, to the post of Matron of the South Yorkshire Mental Hospital, Wadsley.

## GOGARBURN CERTIFIED INSTITUTION.

### (For Mental Defectives.)

#### REPORT BY MEDICAL SUPERINTENDENT.

**General Statistics.**—The following are the general statistics. The increase in the patient population was due to the partial occupation of the two new high grade villas for male patients, which were completed in the course of the year.

	Male.	Female.	Total.
Patients on register at 1st January, 1934 . . .	168	156	324
Cases admitted during the year . . .	35	3	38
Total number under treatment . . .	203	159	362
Cases discharged during the year . . .	...	2	2
Cases transferred to other institutions . . .	1	...	1
Cases died during the year . . .	1	...	1
Total cases removed during the year . . .	2	2	4
Patients on register at 31st December, 1934 . .	201	157	358

The figures represent an increase of 33 male patients and one female patient, being a total increase of 34 in the patient population for the year.

The average daily number of patients on the register during the year was 330.

**Medical Statistics.**—Thirty-eight patients were admitted to the Institution during the year. Of this number 35 were males and 3 were females. Of the 35 male admissions, 13 were children under 16 years of age.



The place of origin of the patients admitted was as follows :—

	Male.	Female.	Total.
Admitted direct from their Homes . . . . .	17	1	18
„ from Western General Hospital . . . . .	1	...	1
„ „ Eastern General Hospital . . . . .	1	...	1
„ „ Northern General Hospital . . . . .	1	...	1
„ „ City Hospital . . . . .	1	...	1
„ „ Craiglockhart Institution . . . . .	12	2	14
„ „ St. Joseph's C. Institution . . . . .	1	...	1
„ „ Polmont Borstal Institution . . . . .	1	...	1
Totals . . . . .	35	3	38

Of the admissions therefore, 47 per cent. were admitted direct from their homes, 37 per cent. from Craiglockhart Institution, 8 per cent. from the Municipal General Hospitals, and 8 per cent. from other Institutions.

The general physical condition of the patients admitted during the year was as follows :—

	Male.	Female.	Total.
In fair or average health and condition . . . . .	15	2	17
In poor or indifferent health and condition . . . . .	6	1	7
In weak or very weak health and condition . . . . .	14	...	14
	35	3	38

Thus in 55 per cent. of the patients admitted, the general standard of health was definitely below normal.

**Classification.**—The following table shows the classification and age grouping of the patients admitted :—

Classification	1-5		6-10		11-15		16-20		21-25		26-30		31-35		36-40		41-45		46-50		Over 50		Totals	
	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Idiot . . . . .	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
Imbecile . . . . .	1	...	3	...	5	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	2	...	13	...
Feeble-minded . . . . .	1	...	...	...	2	...	6	...	3	2	1	1	2	...	...	...	2	...	...	...	3	...	20	3
Total Males . . . . .	3	...	3	...	7	...	7	...	3	...	1	...	3	...	...	...	3	...	...	...	5	...	35	...
Total Females . . . . .	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	3

**Causation.**—So far as could be ascertained the causes of the condition were assessed as follows :—

*Primary Amentia (Inherited).*

	Male.	Female.	Total.
Simple . . . . .	18	3	21
Sclerotic . . . . .	2	...	2
	20	3	23

*Secondary Amentia.*

(Arrest of cerebral development due to external factors.)

	Male.	Female.	Total.
Traumatic . . . . .	2	...	2
Inflammatory . . . . .	5	...	5
Hydrocephalic . . . . .	2	...	2
Syphilitic . . . . .	...	...	...
Epileptic . . . . .	4	...	4
Nutritional . . . . .	2	...	2
	15	...	15

Briefly summarised this table shows that in 60 per cent. of the patients admitted the condition of mental defectiveness was due to inherited taint. In the remaining 40 per cent., however, the mental defect was directly attributable to disease or injury in infancy and childhood, causing arrest of, or serious impediment to the normal development of the growing brain. The degree of mental crippling caused by disease or injury is almost invariably more severe than that caused by the operation of hereditary factors, and its incidence is fairly equally distributed among all classes of the community. The causes of these tragedies are known, but what is more important they are in the majority of cases, preventible. It is unfortunate that the generally accepted view that mental defectives always spring from tainted stock and that sterilisation would speedily effect a reduction in their numbers, has obscured the fact that an increasingly vigorous attack on the problems relating to child life and health has an equally important part to play, not only in reducing the incidence of mental deficiency, but also in raising the standard of mental health of the community as a whole.

**Discharges.**—Three patients were discharged from the Institution during the year. The method of their disposal is shown in the accompanying table.

	Male.	Female.	Total.
Discharged to their homes . . . . .	...	2	2
Transferred to Bangour Mental Hospital . . . . .	1	...	1
	1	2	3

The applications by parents and guardians for the discharge of their relatives from institutional care were the lowest in Scotland.

**Deaths.**—One death occurred during the year, the cause of death being acute lobar pneumonia in a man, aged sixty-three years. The death rate of 3.0 per 1000 was by far the lowest recorded by any public institution of equal size for the treatment of mental disease in this country during the year under review.

**General Health.**—The general health of both patients and staff during the year has been satisfactory. It will be recalled that in the Annual Report of the Institution for the Year 1933, attention was drawn to the fact that an epidemic of diphtheria had occurred, which, although chiefly a mild type, had infected a total number of sixty persons, including members of the staff and adult patients. As a result seventy-two

per cent. of the patients and all the members of the staff were tested for susceptibility to diphtheria and scarlet fever, and where the tests revealed a person to be susceptible to either or both of these diseases they were immunised against it. The effect of this measure has been that during the present year only one case of diphtheria occurred, and that in a member of the nursing staff who had been infected in the previous epidemic.

No case of scarlet fever occurred.

In a community such as Gogarburn acute surgical emergencies arise from time to time as they do in the general population. I wish to express my indebtedness to the Medical Superintendent and staff of the Western General Hospital for the prompt and effective manner in which they have dealt with such cases during the year. Two cases are particularly striking. A patient on admission was found to be suffering from gastric ulcer. A few days later this ulcer perforated, and the patient immediately became seriously and acutely ill. The Western General Hospital was notified and in thirty minutes he had not only been removed but was actually in the operating theatre, ready to be operated on. He made a speedy and uneventful recovery.

The other case was that of a nurse on night duty, who suddenly collapsed. Examination revealed her to be suffering from acute appendicitis. She was removed to the Western General Hospital, operated on, a gangrenous appendix removed, and was safely back in bed in less than one hour.

The long immunity from accident which the Institution has enjoyed was not continued this year. Three accidents occurred, one affecting a patient and two affecting members of the staff.

A patient slipped and fell in one of the wards, sustaining a simple fracture of the collar bone. His recovery was uneventful.

An attendant fell from a ladder whilst engaged in cleaning windows. He sustained a fracture of the left elbow, which necessitated surgical operation in the Western General Hospital. He made a good recovery, regaining full use of the injured arm.

An assistant cook, whilst using an electrically-driven mixing machine on which she had omitted to use the guard provided, had her right hand trapped by the machine and badly crushed. She was removed to the Western General Hospital where it was found necessary to amputate the index and middle fingers. Fortunately a good functional result was obtained, and the girl is able to continue in full employment.

**General.**—The two high grade villas which were completed in the course of the year were formally opened by the Lady Provost, Lady Thomson, on Saturday, the 7th July. Advantage was taken of this function to hold a sale of the work done by the school children, the adult patients, and articles made and contributed by the staff and friends. Favoured by good weather, a most successful and enjoyable function was largely attended by members of the Corporation and friends. A sum of eighty pounds was realised from the sale, with which every villa in the Institution was equipped with an electrically-operated wireless set.

**The Staff.**—Several changes in the staff occurred in the course of the year. Dr. Aileen Mathers, the assistant Medical Officer, resigned in March, to take up an appointment as School Medical Officer with Newport County Council. She was succeeded by Dr. Mary A. Hughes.

Miss Herd, the teacher in charge of the Institution school, and who had been a member of the staff since its inception, in 1931, left in September to be married. A successor has not yet been appointed.

The school suffered a further loss in November by the death of Miss Scott, our assistant school teacher, after a very short illness. Miss Scott had long been associated with the teaching of mentally defective children in Edinburgh institutions for which work she was particularly suited. She will be difficult to replace.

In previous years the training of the nursing staff was organised in accordance with the requirements of the Royal Medico-Psychological Association of Great Britain. The certificate of proficiency granted by this body, however, does not entitle the nurse to have his or her name inscribed on the State Register of nurses. This year the training of nurses was reorganised with the Certificate of the General Nursing Council for its objective. Nineteen nurses were presented for the preliminary examination of this body, and all were successful.

**Recreative Facilities.**—I have to thank those members of the public who so generously brought concert parties to the Institution during the winter months. I have also to thank the members of the staff for the time and effort expended in producing two most enjoyable concerts, in conjunction with the patients.

The Guide and Scout Troups for adult patients, and the Brownie and Cub Packs for the children, all officered by members of the nursing staff in their off duty time, have had a busy and successful year. They continue to thrive and extend vigorously.

**Development of the Institution.**—During the year the temporary kitchen, with its many handicaps and difficulties, was rebuilt and remodelled on a permanent basis. The result has been most successful and gratifying. The building originally intended as a Steward's store was also successfully adapted to form a general recreation hall and school.

Two high grade double-storied villas, giving accommodation in each case to 56 patients, were completed, and partially occupied in the course of the year.

The erection of two single-storied children's blocks was commenced in the late autumn. The completion of these blocks will also complete the present programme of building an institution of 500 beds.

**Acknowledgments.**—It is with pleasure that I acknowledge my indebtedness to Matron, the Assistant Matrons, and the Staff generally, for their loyal and efficient help throughout the year.



## SCHOOL MEDICAL SERVICE.

The following is a report on the work of the School Medical Service for the year ending 31st July, 1934.

### Number of Schools.

The number of Schools and Special Classes under the Scheme of Medical Inspection is 107 :—

Elementary Schools . . . . .	72
Intermediate and Secondary Schools . . . . .	17
Special Schools and Classes . . . . .	14
Merchant Company Schools . . . . .	4
	<hr/>
	107
	<hr/>

The average number of pupils on the roll was 64,683, with an average daily attendance of 59,047 :—

	Average Roll.	Average Attendance.
Elementary Schools . . . . .	40,520	36,877
Intermediate and Secondary Schools . . . . .	12,296	11,326
Special Schools . . . . .	1,157	1,006
Episcopal Schools . . . . .	755	685
Roman Catholic Schools . . . . .	6,106	5,596
Merchant Company Schools . . . . .	3,849	3,557
	<hr/>	<hr/>
	64,683	59,047
	<hr/>	<hr/>

### Altered Method of Medical Inspection.

During the past year there was continued the experiment in altered method of medical inspection. Briefly, it consists of (1) routine examination of all new entrants ; (2) routine examination of children in their 13th year ; (3) (a) inspection of other children in their class-rooms, and (b) full examination of doubtful cases " selected " at class-room inspections.

### Class-room Inspections.

There were inspected in class rooms 21,426 children (boys, 10,454 ; girls, 10,972) of varying ages. For these, 3,517 notices (16·4 per cent.) to parents of defects were given at once—(boys, 1,187 or 33·2 per cent. ; girls, 2,330 or 66·8 per cent.).

In addition, 288 (boys, 148 ; girls, 140) were selected for further examination ; so far, 106 (boys, 49, girls, 57) of these have been examined and 37 further notices (34 per cent.) were given ; a total of 3,554. Further, 36 (boys, 16 ; girls, 20) were placed under medical supervision.

### Vision and Hearing in 7-Year-Olds.

Under the present scheme, the first routine testing of vision and hearing is held at age 7 instead of age 9 as formerly was the case. The statistics of these tests are as follows :—

Total numbered examined . . . . .	4,978 (boys, 2,498 ; girls, 2,480)
No. found defective . . . . .	684 or 13·7 per cent.
Vision . . . . .	655 (boys, 50 per cent. ; girls, 50 per cent.)
Hearing . . . . .	29 (boys, 37·9 per cent. ; girls, 62·1 per cent.)
No. referred to the Medical Officer . . . . .	162
Vision . . . . .	137 (boys, 54 per cent. ; girls, 46 per cent.)
Hearing . . . . .	25 (boys, 28 per cent. ; girls, 72 per cent.)
No. of Cards issued . . . . .	434
Vision . . . . .	410 (boys, 50 per cent. ; girls, 50 per cent.)
Hearing . . . . .	24 (boys, 62·5 per cent. ; girls, 37·5 per cent.)

To summarise:

- (1) There have been brought under the direct purview of the Medical Officers over 17,000 more children than would have been under the usual circumstances.
- (2) Of the above, 3,500 received "Notices to Parents" of defects of which the majority would probably not have been detected for three years.
- (3) Over 430 children were found to require specialist examination for visual defect two years earlier than under the prior system.

It is of interest to note that of the 106 "Selected" children, acquired heart disease was found in 0·6 per cent. and functional disease in 1·2 per cent.; lung conditions were found in 6·2 per cent.; and anæmia in 6·2 per cent.

### **Diphtheria Immunisation.**

There was continued, during the year, voluntary immunisation of infant entrants against diphtheria. Some 3,517 consent forms, applying to over 4,000 children, were issued to parents, but the acceptances were somewhat disappointing and only 589 completed the full course of three injections of Formol Toxoid.

### **Organisation and Administration.**

System of medical inspection. The following groups of pupils are examined:—

#### *In Primary Schools—*

- (a) Newly enrolled infants.
- (b) Sub-leavers (in 13th year).
- (c) Remainder inspected in class-rooms.

#### *In Intermediate and Secondary Schools—*

- (a) Twelve-year-old pupils.
- (b) Sixteen-year-old pupils.

Schools are visited at regular intervals during the session by the same doctor and the same nurse. The larger schools are visited once a fortnight, small schools every three or four weeks.

### **Number of Visits to Schools for Systematic Examination in accordance with Scheme of Inspection.**

The total number of visits paid to schools in connection with routine examinations was 1,468.

At each visit to schools for routine inspection, a certain time is devoted to the examination of any pupils presented by the Head Master or sent by Attendance Officers; those pupils constitute the "special" cases mentioned in the report. In addition, Monday forenoons and Wednesday afternoons are devoted to the examination at Lauriston Place Treatment Centre of cases sent up by the Chief Attendance Officer, and to cases requiring more detailed examination. Similar cases are examined at Links Place Treatment Centre on Wednesday afternoons.

All the Special Schools are visited at regular intervals.

**Nurses.**—The total number of nurses employed on school work is sixteen. Six assist at school inspection, four are attached to Special Schools, and six to the Treatment Centres.

**Duties in Schools.**—In addition to assisting at routine inspections, where 1,395 visits were paid to schools, 6,477 special examinations were made in schools by the nurses in connection with neglect cases; the testing of vision and hearing of 4,978 children was also carried out by the nurses.

*Home Visitation.*—The nurses paid 1,038 visits to homes.

**Arrangements for "Following Up."**—In connection with dirty and verminous conditions, 163 notices were issued from schools. These cases are visited by the nurses, usually with satisfactory results, but it was found necessary to serve statutory warning notices upon 28 parents.

*Insufficient Food, Boots, or Clothing.*—Warning notices are sent from schools regarding these conditions, and when application is made by parents for assistance, either for food or clothing, a full inquiry is made into the case by a committee, which decides whether the case is one of poverty and deserving relief, or one of neglect to be dealt with by statutory notice, etc.

*Education Committee's Feeding Scheme.*—Details regarding this scheme are given later in the report.

*Clothing of Necessitous Children.*—The requirement as regards clothing and boots for necessitous children continues to be met by the operations of the Police-Aided clothing scheme and other charitable agencies. Details are given later in the Report.

The following table shows the number of warning notices under section 6 of the 1908 Act served upon parents for the various forms of neglect :—

Form of Neglect.	Number of Notices served.
Insufficient Boots and Clothing . . . . .	6
Dirt and Vermin . . . . .	28
Neglect of Medical Treatment . . . . .	5
	<hr/> 39

**Infectious Diseases.**—The following table gives the total number of children absent during the session owing to various infectious diseases, showing actual cases and contacts. In the table the monthly totals are shown.

### Absence Due to Infectious Disease.

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Totals.	Per cent. of Totals.	Actual Cases.	Contacts.
1. Scarlet Fever . . . . .	685	1277	1097	890	510	428	365	137	173	162	78	5,802	29.4	3,217	2,585
2. Diphtheria . . . . .	87	139	190	103	67	100	116	52	63	83	66	1,066	5.4	513	553
3. Erysipelas . . . . .	...	...	...	...	2	2	...	2	...	...	...	6	0.03	6	...
4. Dysentery . . . . .	...	1	1	...	...	...	1	...	...	...	...	3	0.01	3	...
5. Typhoid . . . . .	...	1	2	1	...	...	...	...	...	...	...	5	0.02	5	...
6. Measles . . . . .	4	23	10	13	11	91	661	1055	1059	1053	258	4,238	21.4	3,399	839
7. Whooping Cough . . . . .	31	8	4	6	3	12	11	29	29	25	32	190	1.0	181	9
8. Chicken-pox . . . . .	87	104	120	165	244	251	321	190	149	207	59	1,897	9.6	1,647	250
9. Mumps . . . . .	20	57	78	114	280	587	1155	729	810	867	294	4,991	25.3	4,227	764
10. Skin Diseases . . . . .	43	93	87	51	24	51	34	25	65	66	21	560	2.8	560	...
11. Ringworm . . . . .	10	12	14	9	10	21	27	8	7	13	6	137	0.7	137	...
12. Itch . . . . .	58	109	139	83	26	76	87	39	61	58	30	766	3.9	766	...
13. Eye Diseases . . . . .	11	8	9	7	2	8	9	4	12	8	4	82	0.4	82	...
Totals . . . . .	1036	1832	1751	1442	1180	1627	2787	2270	2428	2542	848	19,743	100.0	14,743	5,000

**Presence of Parents at Inspection.**—The number of parents present at the routine inspection was 6,143 for the 11,321 pupils examined—54·3 per cent.

## THE PHYSICAL CONDITION OF THE SCHOOL CHILDREN.

### Total Number of Children Examined.

#### (a) At Systematic Examinations.

		No. of Examinations.
Infants . . . . .	Boys, 3,015 ; Girls, 2,910 = 5,925	
12-year-olds . . . . .	„ 2,518 ; „ 2,726 = 5,244	
16-year-olds . . . . .	„ 48 ; „ 104 = 152	
	—	11,321
<i>Nursery Schools—</i>		
Lochrin . . . . .	Boys, 18 ; Girls, 18 = 36	
Tynecastle . . . . .	„ 10 ; „ 11 = 21	
	—	57
Merchant Company Schools . . . . .		1,772
Royal High . . . . .		296
Royal High (Preparatory) . . . . .		116
Special Schools : Examinations and Re-examinations . . . . .		2,334
		<hr/> 15,896

#### (b) Special Cases.

Psychological Examinations . . . . .	305
Special Cases at Schools . . . . .	10,596
Special Cases at Clinics . . . . .	9,612
Neglect Cases . . . . .	6,477
Children, aged 7, examined <i>re</i> Vision and Hearing . . . . .	4,978
Class Inspections . . . . .	21,426
Re-examinations . . . . .	2,473
Examinations in connection with Employment Act . . . . .	*2,193
Children for Stichill . . . . .	366
Children at Stichill . . . . .	750
In connection with Milk Scheme . . . . .	†1,795
Children immunised against Diphtheria . . . . .	589
	<hr/> 61,560
Total Number of Examinations . . . . .	<hr/> 77,456

\* Of this number, 12 were found to be medically unfit, and were dismissed from their employment.

† Of this number, 480 were recommended for Free Milk.

### Number of Children Notified to Parents as Suffering from Defects.

At systematic examinations, 1,901 notices were issued. Of these, 665 or 35·0 per cent. were in connection with defective vision ; 480 or 25·3 per cent. for tonsils and adenoids, otorrhœa, etc. ; 459 or 24·1 per cent. for teeth ; 163 or 8·6 per cent. for dirty or verminous condition of head ; 134 or 7·0 per cent. for other conditions. If the number of notices given at class-room inspections be added, the total is 5,455.

### Supervision.

Of the 10,596 special cases seen at schools, 187 were re-examined, and 124 or 66·3 per cent. were cured or improved.



At routine examinations, 1,129 cases were placed under medical supervision. For these, there were 1,143 re-examinations and 548 or 47·9 per cent. were cured or improved.

### Insufficiency of Clothing and Footgear.

The Committee of the Police-Aided Scheme supplied boots and clothing to 6,358 children. Through the kindness of the Leith Provident Society, 96 pairs of boots were supplied to necessitous children; 96 children were supplied with boots by the Education Committee on condition that they were paid for by the parents; boots and clothing were supplied to 75 necessitous children under Section 6 of the 1908 Act; from the Flora Stevenson Fund, 124 pairs of boots were distributed.

### Heights and Weights

	Number Examined.	Average Height in Inches.	Average Weight in Pounds.
<i>Boys—</i>			
Infants . . . . .	2,867	42·3	41·1
12 year-olds . . . . .	2,267	56·2	77·6
16 year-olds . . . . .	48	64·2	111·4
<i>Girls—</i>			
Infants . . . . .	2,744	41·8	39·2
12 year-olds . . . . .	2,388	57·1	79·6
16 year-olds . . . . .	102	62·3	110·8

### Cleanliness of Head.

	Number. Examined.	Nits.		Verminous.		Dirty.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Boys—</i>							
Infants . . . . .	3,015	5	0·1	1	0·03	1	0·03
12-Year-Olds . . . . .	2,518	4	0·1	1	0·03	...	...
16-Year-Olds . . . . .	48	...	...	...	...	...	...
<i>Girls—</i>							
Infants . . . . .	2,910	100	3·4	7	0·2	2	0·07
12-Year-Olds . . . . .	2,726	153	5·6	1	0·03	...	...
16-Year-Olds . . . . .	104	...	...	...	...	...	...
Total . . . . .	11,321	262	2·3	10	0·09	3	0·03

### Cleanliness of Body.

	Number. Examined.	Dirty.		Verminous.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . . . .	3,015	2	0·06	...	...
Girls . . . . .	2,910	2	0·07	2	0·07
<i>12-Year-Olds—</i>					
Boys . . . . .	2,518	2	0·07	1	0·03
Girls . . . . .	2,726	4	0·1	1	0·03
<i>16-Year-Olds—</i>					
Boys . . . . .	48	...	...	...	...
Girls . . . . .	104	...	...	...	...
Total . . . . .	11,321	10	0·09	4	0·03

## Condition of Skin.

## (a) Head.

	Number Examined.	Ringworm.		Impetigo.		Others.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	3,015	1	0.03	7	0.2	12	0.4
Girls . . . . .	2,910	1	0.03	13	0.4	10	0.3
<i>12-Year-Olds—</i>							
Boys . . . . .	2,518	...	...	...	...	8	0.3
Girls . . . . .	2,726	...	...	30	1.1	6	0.2
<i>16-Year-Olds—</i>							
Boys . . . . .	48	...	...	...	...	...	...
Girls . . . . .	104	...	...	...	...	...	...
Total . . . . .	11,321	2	0.01	50	0.4	36	0.3

## (b) Body.

	Number Examined.	Ringworm.		Impetigo.		Others.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	3,015	2	0.06	6	0.2	29	0.9
Girls . . . . .	2,910	1	0.03	3	0.1	24	0.8
<i>12-Year-Olds—</i>							
Boys . . . . .	2,518	...	...	...	...	30	1.1
Girls . . . . .	2,726	1	0.03	3	0.1	10	0.3
<i>16-Year-Olds—</i>							
Boys . . . . .	48	...	...	...	...	1	2.0
Girls . . . . .	104	...	...	...	...	...	...
Total . . . . .	11,321	4	0.03	12	0.1	94	0.8

## Nutrition.

	Number examined.	Above Average.		Average.		Below Average.		Bad Nutrition.	
		Number.	Per Cent.	Number.	Per Cent.	Number	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys . . . . .	3,015	736	24.4	2,048	67.9	230	7.6	1	0.03
Girls . . . . .	2,910	568	19.5	2,013	69.2	323	11.1	6	0.2
<i>12-Year-Olds—</i>									
Boys . . . . .	2,518	539	21.4	1,732	68.7	244	9.6	3	0.1
Girls . . . . .	2,726	710	26.0	1,802	66.1	211	7.7	3	0.1
<i>16-Year-Olds—</i>									
Boys . . . . .	48	27	56.3	19	39.5	2	4.1	...	...
Girls . . . . .	104	45	43.2	58	55.7	1	0.9	...	...
Total . . . . .	11,321	2,625	23.2	7,672	67.7	1,011	9.0	13	0.1

## Teeth.

	Number examined.	Sound.		1-4 Decayed.		5 or more Decayed.		Oral Sepsis.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys . . .	3,015	789	26·2	1,917	63·6	309	10·2	53	1·7
Girls . . .	2,910	726	24·9	1,882	64·7	302	10·4	36	1·2
<i>12-Year-Olds—</i>									
Boys . . .	2,518	973	38·6	1,484	58·9	61	2·4	10	0·3
Girls . . .	2,726	1,158	42·4	1,495	54·8	73	2·7	15	0·5
<i>16-Year-Olds—</i>									
Boys . . .	48	29	60·4	19	39·5	...	...	...	...
Girls . . .	104	69	66·3	34	32·7	1	0·9	1	0·9
Total	11,321	3,744	33·1	6,831	60·3	746	6·6	115	1·0

## Nose, Throat and Glands.

## (a) Nose.

	Number Examined.	Catarrh.		Obstruction.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	3,015	96	3·1	11	0·3	2	0·06
Girls . . . . .	2,910	63	2·1	1	0·03	1	0·03
<i>12-Year-Olds—</i>							
Boys . . . . .	2,518	32	1·2	9	0·3	...	...
Girls . . . . .	2,726	30	1·1	4	0·1	1	0·03
<i>16-Year-Olds—</i>							
Boys . . . . .	48	1	2·0	...	...	...	...
Girls . . . . .	104	...	...	...	...	...	...
Total . . . . .	11,321	222	2·0	25	0·2	4	0·03

## (b) Throat.

		Tonsils.				Adenoids.				Other Diseases.	
		Slightly Enlarged.		Markedly Enlarged.		Probably Present.		Present.			
Number examined.		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
<i>Infants—</i>											
Boys .	3,015	637	21·1	127	4·2	114	3·8	32	1·0	8	0·2
Girls .	2,910	560	19·2	135	4·6	86	2·9	19	0·6	7	0·2
<i>12-Year-Olds—</i>											
Boys .	2,518	259	10·2	41	1·6	30	1·1	3	0·1	2	0·07
Girls .	2,726	317	11·6	56	2·0	20	0·7	7	0·2	5	0·1
<i>16-Year-Olds—</i>											
Boys .	48	2	4·1	...	...	...	...	...	...	...	...
Girls .	104	11	10·5	...	...	...	...	...	...	...	...
Total .	11,321	1,786	15·7	359	3·1	250	2·2	61	0·5	22	0·2

(c) *Lymphatic Glands.*(1) *Submaxillary Glands.*

	Number Examined.	Palpably Enlarged.		Markedly Enlarged.		Cicatrices.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	3,015	47	1.5	...	...	2	0.06
Girls . . . . .	2,910	52	1.7	2	0.07	1	0.03
<i>12-Year-Olds—</i>							
Boys . . . . .	2,518	21	0.8	1	0.03	6	0.2
Girls . . . . .	2,726	19	0.6	...	...	2	0.07
<i>16-Year-Olds—</i>							
Boys . . . . .	48	...	...	...	...	...	...
Girls . . . . .	104	1	0.9	...	...	...	...
Total . . . . .	11,321	140	1.2	3	0.03	11	0.1

(2) *Cervical Glands.*

	Number examined.	Palpably Enlarged.		Markedly Enlarged.		Suppurating.		Cicatrices.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys . . . . .	3,015	259	8.6	5	0.1	...	...	4	0.1
Girls . . . . .	2,910	259	8.9	3	0.1	...	...	9	0.3
<i>12-Year-Olds—</i>									
Boys . . . . .	2,518	122	4.8	2	0.07	...	...	10	0.3
Girls . . . . .	2,726	129	4.7	5	0.1	...	...	15	0.5
<i>16-Year-Olds—</i>									
Boys . . . . .	48	...	...	...	...	...	...	...	...
Girls . . . . .	104	...	...	...	...	...	...	2	1.9
Total	11,321	769	6.7	15	0.1	...	...	40	0.3

**External Eye Diseases.**

	Number examined.	Blepharitis.		Conjunctivitis.		Corneal Opacities.		Strabismus.		Other Diseases.	
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
<i>Infants—</i>											
Boys . . . . .	3,015	15	0.5	9	0.3	1	0.03	107	3.5	3	0.1
Girls . . . . .	2,910	19	0.6	4	0.1	4	0.1	123	4.3	5	0.1
<i>12-Year-Olds—</i>											
Boys . . . . .	2,518	12	0.4	4	0.1	2	0.07	41	1.6	4	0.1
Girls . . . . .	2,726	6	0.2	2	0.07	...	...	44	1.6	6	0.2
<i>16-Year-Olds—</i>											
Boys . . . . .	48	...	...	...	...	...	...	1	0.9	...	...
Girls . . . . .	104	...	...	...	...	...	...	...	...	...	...
Total . . . . .	11,321	52	0.4	19	0.1	7	0.06	316	2.7	18	0.1



## Visual Acuity.

	Number Examined.	Good—6/6.		Fair—6/9 and 6/12.		Bad—6/18 and worse	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>12-Year-Olds—</i>							
Boys . . . . .	2,518	1,939	77.0	336	13.3	243	9.6
Girls . . . . .	2,726	2,081	76.3	388	14.2	257	9.4
<i>16-Year-Olds—</i>							
Boys . . . . .	48	41	85.4	4	8.3	3	6.3
Girls . . . . .	104	76	73.0	18	17.3	10	9.6
Total . . . . .	5,396	4,137	76.7	746	13.8	513	9.5

## Ears.

	Number Examined.	Otorrhœa.		Wax.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	3,015	30	1.0	15	0.5	4	0.1
Girls . . . . .	2,910	18	0.6	8	0.2	7	0.2
<i>12-Year-Olds—</i>							
Boys . . . . .	2,518	17	0.6	18	0.7	3	0.1
Girls . . . . .	2,726	10	0.3	10	0.3	3	0.1
<i>16-Year-Olds—</i>							
Boys . . . . .	48	...	...	1	0.9	...	...
Girls . . . . .	104	...	...	...	...	...	...
Total . . . . .	11,321	75	0.7	52	0.4	17	0.1

## Hearing.

	Number Examined.	Slightly Deaf.		Markedly Deaf.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . . . .	3,015	8	0.2	...	...
Girls . . . . .	2,910	9	0.3	1	0.03
<i>12-Year-Olds—</i>					
Boys . . . . .	2,518	12	0.4	1	0.03
Girls . . . . .	2,726	14	0.5	4	0.1
<i>16-Year-Olds—</i>					
Boys . . . . .	48	...	...	...	...
Girls . . . . .	104	...	...	...	...
Total . . . . .	11,321	43	0.4	6	0.05

## Speech.

	Number Examined.	Defective Speech.		Stammering.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . . . .	3,015	9	0.3	3	0.1
Girls . . . . .	2,910	7	0.2	1	0.03
<i>12-Year-Olds—</i>					
Boys . . . . .	2,518	1	0.03	6	0.2
Girls . . . . .	2,726	1	0.03	2	0.07
<i>16-Year-Olds—</i>					
Boys . . . . .	48	...	...	...	...
Girls . . . . .	104	...	...	...	...
Total . . . . .	11,321	18	0.1	12	0.1

## Mental Condition.

	Number Examined.	Dull or Backward.	
		Number.	Per Cent.
<i>Infants—</i>			
Boys . . . . .	3,015	1	0·03
Girls . . . . .	2,910	3	0·1
<i>12-Year-Olds—</i>			
Boys . . . . .	2,518	6	0·2
Girls . . . . .	2,726	1	0·03
<i>16-Year-Olds—</i>			
Boys . . . . .	48	...	...
Girls . . . . .	104	...	...
Total . . . . .	11,321	11	0·1

## Heart and Circulation.

	Number examined.	Organic Heart Disease.				Functional Disorder.		Anæmia.	
		Congenital.		Acquired.					
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys . . . . .	3,015	6	0·2	18	0·6	39	1·3	23	0·7
Girls . . . . .	2,910	2	0·07	11	0·3	37	1·2	19	0·6
<i>12-Year-Olds—</i>									
Boys . . . . .	2,518	2	0·07	16	0·6	25	0·9	14	0·5
Girls . . . . .	2,726	5	0·1	36	1·3	30	1·1	14	0·5
<i>16-Year-Olds—</i>									
Boys . . . . .	48	...	...	...	...	...	...	...	...
Girls . . . . .	104	...	...	...	...	...	...	...	...
Total	11,321	15	0·1	82	0·7	133	1·1	71	0·6

## Lungs.

	Number examined.	Chronic Bronchitis.		Tuberculosis.		Suspected Tuberculosis.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys . . . . .	3,015	33	1·0	...	...	1	0·03	74	2·4
Girls . . . . .	2,910	16	0·5	...	...	1	0·03	63	2·1
<i>12-Year-Olds—</i>									
Boys . . . . .	2,518	8	0·3	...	...	...	...	18	0·7
Girls . . . . .	2,726	5	0·1	...	...	1	0·03	25	0·9
<i>16-Year-Olds—</i>									
Boys . . . . .	48	...	...	...	...	...	...	...	...
Girls . . . . .	104	1	0·9	...	...	...	...	...	...
Total	11,321	63	0·5	...	...	3	0·03	180	1·6

## Nervous System.

	Number examined.	Epilepsy.		Chorea.		Infantile Paralysis.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	3,015	...	...	2	0·06	4	0·1	10	0·3
Girls .	2,910	2	0·07	3	0·1	7	0·2	11	0·3
<i>12-Year-Olds—</i>									
Boys .	2,518	...	...	2	0·07	2	0·07	12	0·4
Girls .	2,726	1	0·03	5	0·1	...	...	7	0·2
<i>16-Year-Olds—</i>									
Boys .	48	...	...	...	...	...	...	...	...
Girls .	104	...	...	...	...	...	...	...	...
Total	11,321	3	0·03	12	0·1	13	0·1	40	0·3

## Tuberculosis.

	Number examined.	Glands.		Bones and Joints.		Abdominal.		Other Forms.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	3,015	3	0·1	3	0·1	1	0·03	...	...
Girls .	2,910	1	0·03	...	...	...	...	1	0·03
<i>12-Year-Olds—</i>									
Boys .	2,518	1	0·03	3	0·1	1	0·03	...	...
Girls .	2,726	...	...	...	...	1	0·03	...	...
<i>16-Year-Olds—</i>									
Boys .	48	...	...	...	...	...	...	...	...
Girls .	104	...	...	...	...	...	...	...	...
Total	11,321	5	0·04	6	0·05	3	0·03	1	0·008

## Rickets.

	Number Examined.	Slight.		Marked.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys .	3,015	35	1·1	3	0·1
Girls .	2,910	13	0·4	8	0·2
<i>12-Year-Olds—</i>					
Boys .	2,518	10	0·3	3	0·1
Girls .	2,726	7	0·2	2	0·07
<i>16-Year-Olds—</i>					
Boys .	48	...	...	...	...
Girls .	104	...	...	...	...
Total	11,321	65	0·5	16	0·1

**Deformities.**

	Number Examined.	Congenital.		Acquired.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . .	3,015	4	0·1	17	0·5
Girls . . .	2,910	9	0·3	14	0·4
<i>12-Year-Olds—</i>					
Boys . . .	3,518	2	0·07	11	0·4
Girls . . .	2,726	1	0·03	12	0·4
<i>16-Year-Olds—</i>					
Boys . . .	48	...	...	...	...
Girls . . .	104	...	...	...	...
<b>Total .</b>	<b>11,321</b>	<b>16</b>	<b>0·1</b>	<b>54</b>	<b>0·4</b>

**Infectious or Contagious Diseases.**

(These are given under Skin Diseases and Tuberculosis.)

**Vaccination.**

	Number Examined.	No Mark.	
		Number.	Per Cent.
<i>Infants—</i>			
Boys . . . . .	3,015	609	20·2
Girls . . . . .	2,910	577	19·8
<i>12-Year-Olds—</i>			
Boys . . . . .	2,518	343	13·6
Girls . . . . .	2,726	380	13·9
<i>16-Year-Olds—</i>			
Boys . . . . .	48	5	10·4
Girls . . . . .	104	7	6·7
<b>Total . . . . .</b>	<b>11,321</b>	<b>1,921</b>	<b>16·9</b>

**SPECIAL SCHOOLS AND CLASSES.**

*Special Schools.*—The following is a list of the Special Schools and Classes which were open during the session, and the number of pupils on the roll as at the close of the session :—

*For Mentally Defective Children—*

Balfour Place . . . . .	188
Duncan Street . . . . .	109
St. Christopher's . . . . .	100
St. Nicholas . . . . .	106
	<u>503</u>

*For Physically Defective Children—*

Clarebank . . . . .	131
Duncan Street . . . . .	62
Gorgie . . . . .	133
Willowbrae . . . . .	129
	<u>455</u>

*For Ineducable Children—*

Slateford Occupation Centre . . . . .	<u>80</u>
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*For Children Suffering from Ringworm—*

Lauriston Place . . . . .	<u>17</u>
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*For Delicate Children—*

Stichill . . . . .	71
	<u>      </u>
<i>For Children Suffering from High Myopia—</i>	
Myopia School . . . . .	76
	<u>      </u>

*For Children Suffering from Tuberculosis—*

Colinton Mains Hospital Class. . . . .	23
	<u>      </u>

*For Cripple Children—*

Douglas Home . . . . .	*28
Taught at home by Visiting Teachers . . . . .	20
	<u>      </u>
	48
	<u>      </u>

*For Hard of Hearing Children—*

Deaf and Dumb Institution . . . . .	†6
	<u>      </u>

\* Of this number, the Education Committee paid for the maintenance of 5. (This number (28) includes children from outwith Edinburgh.)

† This class was discontinued at the end of the session.

### Physically Defective Children.

There were 455 pupils on the roll at the end of the session classed as physically defective. The following is a rough classification of the defects found :—

Paralysis of various types . . . . .	40
Tubercular diseases of—	
Bones . . . . .	6
Hip Joint . . . . .	8
Abdomen . . . . .	10
Glands . . . . .	15
Spinal Cases . . . . .	7
Rickets . . . . .	36
Accidents . . . . .	8
Heart Affections . . . . .	91
Speech defects . . . . .	9
Otorrhœa and Deafness . . . . .	13
Lung Disease (bronchitis and pre-tubercular cases) . . . . .	109
Defective vision . . . . .	5
Malnutrition . . . . .	9
Other conditions . . . . .	89
	<u>      </u>
	455
	<u>      </u>

One hundred and sixty pupils left during the session. The reasons for leaving were : returned to ordinary schools, 40 ; transferred to other special schools, 23 ; over age, 54 ; medically exempted, 20 ; left district, 18 ; died, 2 ; sent to institutions, 3.

### Mentally Defective Children.

*Investigation of Cases.*—Children are referred for investigation with regard to mental deficiency from many sources, including :—Head Teachers, Medical Officers, Hospitals, Police Courts, Clinics and outside Societies. A report from the Head Teacher is obtained on prescribed forms and the child then examined medically and tested psychologically. All the reports are considered and recommendations made to the Education Committee who decide as to the child's disposal—whether ineducable, for Institution, Special School, or otherwise.

The number of cases examined psychologically and reported on during the session was 305.

The disposal of these was as follows :—

Passed for Special Schools . . . . .	80
Passed for Special Schools (on probation) . . . . .	14
Considered dull . . . . .	*127
Considered backward . . . . .	16
Continued for further consideration . . . . .	†44
Considered ineducable . . . . .	‡22
Recommended for admission to Certified Institution . . . . .	1
Recommended for instruction by Voluntary Teacher . . . . .	1
	<hr/>
	305

\* 3 of this number were recommended for P.D. School.

† 1 of this number was recommended for P.D. School.

‡ 8 of this number were considered suitable for Occupation Centre.

There were 503 mentally defective pupils on the roll at the end of the session. These have been classed according to the progress made during the session :—

Good . . . . .	269 or 53.4 per cent.
Fair . . . . .	183 „ 36.3 „
Little progress . . . . .	51 „ 10.3 „

Ninety-eight pupils left during the session. The reasons for leaving were as follows :—transferred to other special schools, 17 ; sent to Institution, 2 ; over age, 51 ; medically exempted, 8 ; left district, 5 ; granted temporary exemption before attaining 16 years, 5 ; ineducable, 7 ; died, 3.

The temporary exemption granted is conditional upon satisfactory reports at specified intervals being received from the Medical and Attendance Departments. The pupil's name is not removed from the school roll.

In the case of pupils leaving to go to work, inquiry is made by the teacher as to the nature of the work, and advice given as to the work for which the pupil is best suited.

The number of educable defective children maintained by the Education Committee in certified Institutions is as under :—

	Boys.	Girls.
Baldovan . . . . .	1	1
Larbert . . . . .	5	1
Waverley Park . . . . .	...	1
St. Joseph's R.C. . . . .	4	4
Gogarburn . . . . .	13	2
	<hr/>	<hr/>
	23	9
	<hr/>	
	32	

## Blind and Partially Blind Children and Deaf and Mute Children.

*Blind, Deaf-Mute and Epileptic Children.*—Blind and deaf-mute children are dealt with under the powers of the Education of Blind and Deaf-Mute Children (Scotland) Act, 1890, and epileptic children under the Education of Defective Children (Scotland) Act, 1906, as read with the Education Acts of 1908 and 1918. As the Education Committee have no schools under their management for the education of such children, they are sent to special institutions. The following shows the institutions to which children have been sent, and the number of children maintained there by the Education Committee as at the end of the session :—

	Boys.	Girls.
Royal Blind Asylum, Edinburgh . . . . .	7	6
Deaf and Dumb Institution, Edinburgh . . . . .	13	10
Donaldson's Hospital, Edinburgh . . . . .	5	6
St. Vincent's R.C. School, Glasgow . . . . .	1	1
Colony for Epileptics, Bridge of Weir . . . . .	2	1
Home for Epileptics, Maghull, Liverpool . . . . .	1	...
	29	24
	53	

*Blind Persons' Act, 1920.*—The Education Committee are responsible for the technical training at the Royal Blind Asylum workshops of 15 adult blind persons (9 men and 6 women). The training consists of basket-making, brush-making, and mat-making for men, and machine-knitting for women ; in the case of special men trainees instruction in piano-tuning is given, and in the case of special women trainees instruction in massage.

### Pupils Suffering from Ringworm and Favus.

*Lauriston Place Special School.*—This school has accommodation for 60 pupils, and during the session 52 pupils attended, 27 being sent out cured. Of the 27 cases cured, 9 had X-ray treatment, 2 drug treatment, and 16 thallium acetate treatment.

### Special School at Stichill.

*Stichill Special School.*—This school is carried on by the Education Committee under an arrangement with the Leith Holiday Home Committee, and has accommodation for 70 to 80 pupils.

The Education Committee who are Managers of the School, and have complete control of the education of the children in residence pay a sum to meet the cost of food and lodging for the children. A charge is made appropriate to the parents' circumstances in each case.

There are three teachers, and 366 children attended during the session.

The majority of the children suffer from debility and anæmia, though a fair number are cases recovering from illnesses or operations.

## Arrangements for Physical Education and Personal Hygiene of Children.

### PHYSICAL EDUCATION.

Physical education is included in the syllabus of all the Education Committee's schools. In the elementary schools, the instruction is given by class and visiting teachers in accordance with the Board of Education Syllabuses of Physical Exercises, and Physical Exercises for infant classes. In the intermediate and secondary schools the instruction is given by specialist teachers of physical education. The staff consists of a Superintendent, Assistant Superintendent, and 28 assistant teachers (16 women and 12 men). The whole of the physical education, including swimming, in both day and evening schools, is under the direct supervision of the Superintendent. All exercises, as far as possible, are carried out in the open air.

### BATHS.

#### *Swimming.*

There are six school baths and the staff for these consists of six teachers. In addition, six Corporation baths and the attendant instructors are extensively utilised.

### Arrangements for Feeding of Children.

#### *Administration.*

Under the Education Committee's present arrangement, dinners are supplied to three groups of children :—(1) necessitous, supplied free ; (2) pupils whose parents pay at the rate of 1½d. per dinner ; (3) a special two-course dinner at a higher rate for special schools and some of the secondary schools.

*Supply of Milk to School Children.*—It has now been clearly demonstrated that the addition of milk to the diet of children has a striking effect in the improvement of physical and general health and increased mental alertness. The Education Committee's scheme for the supply of milk to school children continued to operate successfully during the year. A daily ration of milk was provided, free of charge, to 480 children on the free food roll at schools in congested districts and who were certified by the medical staff to be in need of additional nutriment, and to 4,490 children on the payment of cost. Fifty-nine schools are now participating, and the total number of milk meals supplied during the year was 1,018,953, representing 42,456 gallons. The scheme is now limited to children in the infant and junior departments, except in the case of children receiving milk free of charge.

### Arrangements for Medical Treatment.

The medical treatment provided by the Education Committee is best described under two heads :—(1) work done at the treatment centres ; (2) arrangements made for the treatment of ringworm.

Clinics are held as under :—

1. Treatment Centres at 45 Lauriston Place, Edinburgh, and 5 Links Place, Leith.
2. Sub-Clinic at Niddrie : Medical Officer and Nurse once weekly.
3. Nurses' Sub-Clinics for minor ailments at Dalry School, St. John's School and Regent Road School twice weekly.
4. Nurses' Sub-Clinics at Special Schools (Balfour Place, Clarebank, Gorgie Special, St. Nicholas and St. Christopher's) twice weekly. A nurse attends daily at Duncan Street and Willow-brac Special Schools.
5. Occupation Centre : Nurse once weekly.



The following shows the number of cases and the number of attendances at these Clinics :—

	No. of Cases.	No. of Attendances.		No. of Cases.	No. of Attendances.
Lauriston . . . .	4,046	17,535	St. John's . . . .	443	2,516
Links Place . . . .	2,977	15,326	Regent Road . . . .	314	1,585
Niddrie . . . . .	551	1,337	Special Schools . . . .	587	4,159
Dalry . . . . .	515	2,193	Occupation Centre . . .	179	578
	<u>8,089</u>	<u>36,391</u>		<u>1,523</u>	<u>8,838</u>

Totals : 9,612 Cases ; 45,229 Attendances.

The Staff at Lauriston Place Centre consists of :—(1) visiting medical officers ; (2) four dentists, one oculist, and one aurist (all part-time) ; (3) three whole-time nurses who assist the oculist, aurist and dentists, and, in addition, carry out treatment of minor ailments ; (4) one nurse for treatment of itch cases.

The Staff at Links Place Centre consists of :—(1) visiting medical officers ; (2) two dentists, one oculist, and one aurist (all part-time) ; (3) two whole-time nurses who assist oculist, aurist and dentists, and, in addition, carry out treatment of minor ailments ; (4) an attendant for treatment of itch cases.

Treatment is given free when the average weekly income of the family, after deducting house rent, does not exceed 10s. per head. In other cases, a charge of 2s. 6d. is made, this charge to cover any necessary treatment carried out at the Clinic for a period of a year. The amount received in payment for treatment during the session was £170 2s. 6d., representing 1,361 children.

Any necessary investigation is made by the Attendance Department.

There is a Special School for pupils suffering from ringworm at 41 Lauriston Place, where treatment is carried out by the nurse.

*Ringworm.*—Children suffering from ringworm are treated at the Royal Infirmary by X-rays or Thallium Acetate. The nurse attached to the special skin school carries out the after-treatment of these cases.

*Treatment of Scabies.*—Provision is made at Lauriston Place and Links Place treatment centres for the treatment of scabies. Baths are fitted up, and a special nurse and attendant supervise the bathing and ointment treatment of the pupils. The pupils, their clothing, the house and bedding are disinfected when a cure is effected. The following are the results for the session, viz. :—*Lauriston Place Centre*—number cured :—Boys, 127 ; girls, 122—Total, 249. The number of attendances made was 2,237. *Links Place Centre*—number cured :—Boys, 86 ; girls, 99—Total, 185. The number of attendances made was 3,189. The number of children bathed and disinfected at the Public Disinfecting Station was :—Boys, 116 ; girls, 120—Total, 236.

**Defective Vision and External Eye Diseases.**—The following are the oculists' reports on cases of defective vision, etc., detected by school doctors in the different schools and referred for further examination.

**Lauriston Place Treatment Centre.**—Altogether 2,207 children were examined for defective vision, of whom 1,593 were found to require glasses. In 108 cases lenses were not prescribed, either owing to the error of refraction being only of a slight degree or because, as some other disease of the eyes was present, little benefit would have been derived from glasses.

In addition to the children who attended for examination of their vision, a large number (466) were treated for external diseases of the eye, the total number of attendances for treatment being 3,147. The treatment is carried out by the school nurse, under the supervision of the oculist. In cases where the treatment could be carried out by the parents at home, they have been shown by the nurse how to apply it.

**Links Place Treatment Centre.**—In all, 901 cases were examined, making 1,088 attendances. A great proportion of these cases were pupils with defective vision. Lenses were not prescribed unless definite visual benefit or the relief of asthenoptic symptoms was likely to result. Lenses were prescribed for 479 pupils.

In addition to the above, a large number of cases of external eye disease was seen. Treatment was carried out by the school nurse under the supervision of the oculist.

*Provision of Spectacles.*—1,351 pairs of spectacles were supplied during the year by the Education Committee; 248 pairs were given free, 91 pairs were paid for by the Public Assistance Committee, while 1,012 were paid for by the parents.

## REPORTS BY AURISTS.

**Lauriston Place Treatment Centre.**—There were 496 examined—274 boys and 222 girls, the number of attendances for the session being 530.

The following conditions were found :—impacted cerumen, 96 ; chronic otitis media suppurativa, 130 ; enlarged tonsils and adenoids, 294.

Palliative remedies are employed at the clinic, such as syringing for discharge, wax, and foreign bodies, douching of nose, politzerisation, etc.

**Links Place Treatment Centre.**—There were 404 cases examined, making 600 attendances.

A record has been kept of the number of children seen at the school clinic and recommended for tonsil and adenoid operations, and who have been operated on at the Ear and Throat Department, Leith Hospital. The cases totalled 269.

It is interesting to note that, in future, children operated on for tonsils and adenoids will be supervised by their teachers in school, so that proper nose breathing after the operation will be assured.

## Defective Teeth.

The pupils selected this session for dental treatment were pupils 6 years old, 9 years old, and 12 years old. The dentists visit the schools, examine all the children and note on charts the condition of the teeth. Where treatment is necessary, a card is sent to parents, and on their signing that they are unable otherwise to secure treatment, and that they consent to the necessary treatment being carried out, notices are issued telling them when to bring the child to the treatment centre.

The following is the record of work done at the dental clinics for the session :—

Eighty-six schools were visited.

The total number of children who received dental treatment was 6,786. It is often difficult to get parents to realise the importance of preventive treatment. Most of the special cases have been sent by the medical staff :—here, the ill-health or pain arising from bad teeth makes parents resort at once to treatment. Included in the special cases are many children who refused treatment when examined as routine cases at 6 or 9 years.

The number examined was :—

*A. Lauriston Place Treatment Centre.*—Boys, 6,060 ; girls, 6,160—Total, 12,220.

There were also examined 380 children (boys, 207 ; girls, 173) attending special schools whose ages were other than 6, 9, and 12 years.

*B. Links Place Treatment Centre.*—Boys, 1,366 ; girls, 1,465—Total, 2,831.

*Condition of Teeth.*—The condition of the teeth is noted in every case, and also the treatment necessary, extraction, filling, etc.

### I. Numbers with Clean Mouths and no evidence of Dental Caries.

*A.* Boys, 1,657 ; Girls, 1,610—Total, 3,267 or 26·7 per cent. of number examined.

*B.* Boys, 194 ; Girls, 257—Total, 451 or 15·9 per cent. of number examined.

### II. Numbers with Dental Caries.

<i>A.</i> 6-year-olds—Boys, 1,418 ; Girls, 1,454—2,872 9-year-olds—Boys, 1,550 ; Girls, 1,571—3,121 12-year-olds—Boys, 1,435 ; Girls, 1,525—2,960	$\left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} 8,953 \text{ or } 73\cdot3 \text{ per cent. of} \\ \text{number examined.} \end{array}$
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<i>B.</i> 6-year-olds—Boys, 363 ; Girls, 393—756 9-year-olds—Boys, 433 ; Girls, 415—848 12-year-olds—Boys, 376 ; Girls, 400—776	$\left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} 2,380 \text{ or } 84\cdot1 \text{ per cent. of} \\ \text{number examined.} \end{array}$
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The following table gives the number of pupils in each age group, with carious teeth—(a) four or less ; (b) more than four :—

	(a) With four or less Carious Teeth.			(b) With more than four Carious Teeth.		
	6 Years.	9 Years.	12 Years.	6 Years.	9 Years.	12 Years.
A. Boys . . . .	703	917	1,162	715	633	273
Girls . . . .	741	917	1,240	713	654	285
Total . . . .	1,444	1,834	2,402	1,428	1,287	558
B. Boys . . . .	221	311	353	142	122	23
Girls . . . .	240	327	358	153	88	42
Total . . . .	461	638	711	295	210	65
Grand Total . .	1,905	2,472	3,113	1,723	1,497	623

A. Of the 8,953 (plus 267 of other ages examined in Special Schools) requiring dental treatment, 2,374 or 25·7 per cent. accepted the services of the school clinic.

It should be noted that the dentists visited, for inspection purposes, most of the outlying schools, where the number of acceptances for treatment was very small.

In addition to the above, 2,352 pupils—1,054 boys, 1,298 girls—were treated as special cases, so that in all 4,726 pupils received dental treatment.

B. Of the 2,380 requiring dental treatment, 929 or 39 per cent. accepted the services of the school clinic.

In addition, 1,131 pupils—517 boys, 614 girls—were treated as special cases, so that in all 2,060 pupils received dental treatment, making 2,182 visits.

### Analysis of Dental Treatment.

#### (a) Conservation.

	Teeth Filled.		Teeth Conserved by Treatment.		Total Number of Teeth Conserved.
	Temporary.	Permanent.	Temporary.	Permanent.	
A. Boys . . . .	7	665	4	28	704
Girls . . . .	14	760	12	14	800
Total . . . .	21	1,425	16	42	1,504
B. Boys . . . .	...	46	2	37	85
Girls . . . .	...	64	3	36	103
Total . . . .	...	110	5	73	188
Grand Total . .	21	1,535	21	115	1,692

#### (b) Extraction.

	Number of Teeth Extracted.		Total.	Anæsthetics.
	Temporary.	Permanent.		
A. Boys . . . .	6,260	1,952	8,212	1,700
Girls . . . .	6,350	2,405	8,755	1,938
Total . . . .	12,610	4,357	16,967	3,638
B. Boys . . . .	1,429	606	2,035	800
Girls . . . .	1,556	781	2,337	918
Total . . . .	2,985	1,387	4,372	1,718
Grand Total . .	15,595	5,744	21,339	5,356

NOTE.—A. refers to Dental Treatment at 45 Lauriston Place.  
B. refers to Dental Treatment at 5 Links Place, Leith.



## ROYAL HIGH AND EDINBURGH MERCHANT COMPANY SCHOOLS.

	Edinburgh Ladies' College.		George Watson's Ladies' College.		George Watson's Boys.		Daniel Stewart's.		Royal High.		Royal High Prep.	
	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
Total number examined . . . . .	311	...	313	...	507	...	229	...	296	...	116	...
Examined by School Doctor . . . . .	*182	58.5	†197	62.9	217	42.8	66	28.8	133	45.0	94	81.0
Examined by Family Doctor . . . . .	129	41.5	116	37.1	290	57.2	163	71.2	163	55.0	22	19.0
<i>Teeth—</i>												
None decayed . . . . .	235	75.5	248	78.9	388	76.5	146	63.7	166	56.0	63	54.3
1 to 5 . . . . .	65	20.9	59	18.8	109	21.5	80	34.9	126	42.6	49	42.2
6 to 10 . . . . .	11	3.2	6	1.9	10	2.0	3	1.3	4	1.4	4	3.4
Stoppings . . . . .	97	31.1	91	28.9	78	15.3	19	8.3	34	11.5	1	0.8
<i>Visual Acuity—</i>												
6 6 . . . . .	248	93.2	253	93.8	467	92.1	213	93.0	255	86.1	84	92.3
6 9—6 12 . . . . .	16	6.0	15	5.6	28	5.5	10	4.3	23	8.0	5	5.5
6 18 and above . . . . .	2	0.7	1	0.4	12	2.3	6	2.6	17	5.8	2	2.2
<i>Eyes—</i>												
Wearing Glasses . . . . .	31	9.0	19	6.0	32	6.3	13	5.6	20	6.7	4	3.4
External Eye Dis- eases . . . . .	...	...	1	0.4	...	...	...	...	...	...	...	...
Squint . . . . .	3	1.0	...	...	3	0.6	...	...	1	0.3	2	1.7
<i>Deafness</i> . . . . .	2	0.6	...	...	...	...	...	...	...	...	...	...
<i>Mouth Breathers</i> . . . . .	3	1.0	5	1.6	3	0.6	3	1.3	3	0.9	1	0.8
<i>Tonsils—</i>												
Enlarged . . . . .	27	8.6	57	18.1	73	14.4	49	21.4	29	9.8	8	6.9
Tonsils and Ade- noids Operation . . . . .	63	20.2	79	25.1	165	32.5	61	26.6	41	13.8	24	20.6
<i>Glands—</i>												
Enlarged . . . . .	11	3.5	30	9.5	10	1.9	16	6.9	2	0.6	...	...
Cicatrices . . . . .	1	0.3	8	2.5	...	...	2	0.8	8	2.7	...	...
<i>Heart—</i>												
Valvular . . . . .	1	0.3	3	0.9	2	0.4	...	...	1	0.3	...	...
Impure Sounds . . . . .	9	2.9	6	1.9	4	0.7	...	...	...	...	...	...
Irregular . . . . .	2	0.7	1	0.4	...	...	2	0.8	1	0.3	...	...
Anæmia . . . . .	2	0.7	4	1.2	...	...	...	...	...	...	...	...
<i>Rheumatism</i> . . . . .	...	...	3	1.2	...	...	...	...	...	...	...	...

\* In addition, 60 children submitted by Head Mistresses as "Special Cases" were examined by the School Medical Officer.

† In addition, 50 do. do. do. do. do.

## PORT SANITARY ADMINISTRATION.

The arrangements made under the Port Sanitary Regulations (Scotland), 1933, which were recorded in last year's report, continue to work smoothly.

During the year Declarations of Health were received from 495 ships arriving from foreign ports, including 38 from ports infected or believed to be infected, and were detained for examination by the medical officer. No infectious illness or suspicious circumstances were discovered, and all were granted their clearance. It was not found necessary to send any ship to the special mooring stations.

The great majority of the foreign shipping comes from continental ports, but there are also a number of arrivals from North and South American ports, from North African, Indian and Far Eastern ports.

The number of ships entering the Port Sanitary District was 10,500, representing a tonnage of 2,942,411, a decrease of 584 vessels and 5,485 tons when compared with 1933.

### AMOUNT OF SHIPPING ENTERING THE PORT SANITARY DISTRICT DURING THE YEAR 1934.

Numbers Inspected.							
		Number.	Tonnage.	By the Assistant M.O.H.	By the Sanitary Inspector.	Number Reported to be Defective.	Number of Notices Issued.
Foreign	Steamers	1,347	1,231,430	131	615	14	10
	Motor	42	53,219	2	42	...	...
	Sailing	...	...	...	...	...	...
	Fishing	...	...	...	...	...	...
Total Foreign		1,389	1,284,649	133	657	14	10
Coastwise	Steamers	5,167	1,356,628	3	285	6	6
	Motor	23	2,899	...	11	...	...
	Sailing	1	50	...	...	...	...
	Fishing	3,920	298,185	...	289	...	...
Total Coastwise		9,111	1,657,762	3	585	6	6
Total Foreign and Coastwise		10,500	2,942,411	136	1,242	20	16

**Imports and Exports.**—The principal items of cargo imported at Leith consist of wheat, barley, oats, maize, rye, flour, meal, sugar, fruit, cement, timber, guano, manure, flax, hemp, fish (fresh and cured), butter, eggs, and esparto grass. Of these the chief import is grain. The exports are chiefly coal, iron, oil, liquor, and ammonia. Coal is the greatest export.

**Medical Inspection of Aliens.**—During the year, 751 alien passengers arrived at the Port. Of these, 207 were subjected to medical inspection at the request of H.M. Alien Immigration Officer. Permission to land was given to all of these passengers.

The alien passengers were classified as follows :—

#### CLASSIFICATION OF ALIEN PASSENGERS.

Resident Returning.	In Transit.	Visitors of Six Months or Less.		Diplomats and Persons on Foreign Government Missions.	Seamen.	Seamen under Contract to Join Ship in British Waters.	Ministry of Labour Permit.	Aliens Coming to Settle not Holding M.L. Permit.
		On Holiday, Tourists, etc.	On Business.					
19	34	480	87	10	7	39	39	36

**Cases of Illness.**—During the year, 7 cases of venereal disease were noted amongst sailors arriving at Leith. One case of each of the following, viz., heart disease, gastric disorder, hæmorrhage, cerebro-spinal meningitis, pulmonary tuberculosis and lumbago were also reported.

**Ship Inspection and Fumigation.**—The routine inspection of all ships is carried out as soon as possible after docking, and details of nuisances and defects found are contained in the report of the Chief Sanitary Inspector.

The inspection of ships for rat infestation is carried out under the Port Sanitary Regulations (Scotland), 1933, and under Article 19 of this Order, 129 Deratisation Exemption Certificates and 34 Deratisation Certificates were granted during the year. Of the latter 7 refer to vessels which were fumigated after arrival from infected ports by reason of rat infestation, and since their previous certificates had expired. The number of exemption certificates indicated that ship masters continue to appreciate the necessity for maintaining their vessels as free from rats as possible.

The fumigation of ships throughout the year was done by means of cyanogen chloride and proved highly satisfactory. Many owners have availed themselves of this method of fumigation of certain parts of their ships for the repression of vermin other than rats.

It has to be recorded that as in former years placards in connection with venereal disease are maintained in selected places in the docks. These are printed in English, Norwegian, Dutch, and German, and draw the attention of seamen and dockers to the existence and location of the Seamen's Dispensary at the Shore, where skilled treatment may be obtained.

## FACTORY AND WORKSHOP ACTS.

The Factory and Workshop Act, 1901 (Section 132), requires the Medical Officer of Health in his annual report to the Town Council to refer to the administration of the Factory Acts, and tabulated statements have been framed with a view to such report being made upon uniform lines. The following report gives, in addition to other information, a summary of the work carried out during the year :—

### 1. INSPECTION.

Premises.	Number of		
	Inspections.	Written Notices.	Occupiers Prosecuted.
Factories . . . . .	364	44	Nil.
Workshops } . . . . .	1,210	54	Nil.
Workplaces }			
(Other than Outworkers' premises.)			
Total . . . . .	1,574	98	Nil.

### 2. DEFECTS FOUND.

Particulars.	Number of Defects.			
	Found.	Remedied.	Referred to H.M. Inspector.	Number of Prosecutions
Want of cleanliness . . . . .	126	126	...	...
Want of ventilation . . . . .	7	7	...	...
Overcrowding . . . . .	...	...	...	...
Want of drainage of floors . . . . .	...	...	...	...
Other Nuisances . . . . .	91	91	...	...
Sanitary { Insufficient . . . . .	7	7	...	...
Accommodation { Unsuitable or defective . . . . .	59	59	...	...
Not separate for sexes . . . . .	3	3	...	...
Illegal Occupation of Underground Bakehouses (sec. 101) . . . . .	...	...	...	...
Breach of provisions relating to Bakehouses—Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921 (Sec. 99 Factory Act) . . . . .	37	37	...	...
Other Offences . . . . .	22	...	22	...
(Excluding Offences relating to Outwork)				
Total . . . . .	352	330	22	Nil.

### 3. HOME WORK—OUTWORKERS' LISTS (sec. 107).

	Feb. 1934.	Aug. 1934.
Total number of lists received . . . . .	37	34
Number of outworkers on Lists (i.e., those residing in Edinburgh) . . . . .	82	71
(Note.—These figures include outworkers who may be working for more than one firm and therefore appear on more than one list.)		
Number of addresses of outworkers residing in other districts forwarded to other Local Authorities . . . . .	9	9
Number of addresses of outworkers received from other Local Authorities . . . . .	7	6
Actual number of outworkers on Register, at date of last Returns . . . . .	...	63
(Note.—The majority of these are home-workers but a number of them actually do the work in ordinary factories and workshops.)		



*Nature of Work—*

- (1) Making, altering, repairing, etc., of wearing apparel.
- (2) Making up, ornamenting, repairing, etc., of table linen
- (3) Making of boxes or other receptacles of paper, cardboard, or similar material.

Outwork in Unwholesome Premises (Sec. 108)	. . . . .	Nil.
Outwork in Infected Premises (Secs. 109 and 110)	. . . . .	Nil.

**4. REGISTERED FACTORIES AND WORKSHOPS.**

## Premises on Registers at end of year.

		Number.
Workshops (various trades)	. . . . .	1,001
Bakehouses	{	
Factories	. . . . .	133
Workshops	. . . . .	65
	—	198
Underground Bakehouses in use at end of year	. . . . .	60

**5. OTHER MATTERS.**

## Matters referred to H.M. Inspector of Factories :—

Failure to affix abstract of the Factory and Workshop Act (Sec. 133)	. . . . .	22
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## Action taken in matters referred by H.M. Inspector of Factories :—

Matters remediable under the Public Health Act but not under the Factory Act	. . . . .	6
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Sanitary Accommodation for Factories and Workshops—Intimations received by Local Authority in order that work might be carried out according to Local Regulations	. . . . .	18
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Notices received for the information of Local Authority re Bakehouses—Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921 (Secs. 97-100 Factory Act)	. . . . .	3
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Number of notices of occupation of workshops received from H.M. District Inspector of Factories	. . . . .	45
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## Miscellaneous Complaints :—

Received from other Departments	. . . . .	3
Anonymous	. . . . .	1
Received from Public	. . . . .	9
	—	13

## FACTORIES AND WORKSHOPS.

Although it must be admitted that the reduction of working hours and the provision of welfare schemes in industry must necessarily have a beneficial effect on the health of workers, it cannot be disputed that the hygienic conditions under which work is carried on are at least equally important. In this connection it has to be recorded that in Edinburgh the general conditions, especially as regards compliance with the statutory duties of lime-washing walls and ceilings, have been well maintained, yet irregularities are still frequently met with. The hygienic standards in industrial life have to meet with the approval of the technical observer as well as the requirements of the law, and it is clear that regular and systematic inspection is very necessary, and that there is still much to be done both by occupiers and workers to bring some work-places up to a higher standard. Besides the cleaning of walls and ceilings which must be done periodically, the regular and thorough cleansing of floors, machines, and work-benches should receive strict attention. Much neglect is found in this matter, and pressure is constantly being exercised in securing a better average standard. Even the threat of legal proceedings had to be made, during the year, in two instances, to remedy unsatisfactory conditions.

Comment must also be made on the widely differing standards found in regard to sanitary accommodation. While premises of modern construction have a good class of accommodation, in others a much inferior standard exists, the most common defects being inadequate ventilation, defective lighting (natural and artificial), failure to provide an intervening ventilated space between a convenience and the workshop, lack of screening to secure privacy, and defective flushing arrangements. Every difficulty, especially that of maintaining the accommodation in a cleanly state, tends to be accentuated where conveniences are used in common in smaller workshops by different sets of workers. Proper supervision secures cleanliness, and if, as is occasionally the case, an occupier or manager says he never inspects the conveniences then it is practically certain that they will be found dirty.

The appended tables giving the number of defects found and remedied have been classified under certain headings, but the undernoted details amplify these, and convey a fuller idea of the nature of the work which has been carried out :—

1. Roofs, Walls, Ceilings, Floors, Windows, Stairways, and Courtyards— general repairs or improvements effected . . . . .	42
2. Sanitary Accommodation introduced . . . . .	7
3. Separate Sanitary Accommodation for sexes provided . . . . .	3
4. Intervening Ventilated Space between convenience and workroom provided . . . . .	10
5. Water-closets replaced by modern apparatus . . . . .	7
6. W.C. apartments insufficiently ventilated—improvements made . . . . .	13
7. Artificial Lighting (Electric) provided for W.C. apartments . . . . .	11
8. Sinks and Wash-hand Basins introduced or substituted by modern appliances . . . . .	8
9. Repairs effected to W. C. fittings or apartments . . . . .	13
10. Provision of " Main " Water Supply . . . . .	6
11. Hot Water Systems entirely renewed in copper . . . . .	2

In the baking trade the present-day tendency is to increase the size of the unit of manufacture rather than the number of units. In consequence the increase in the work of inspection cannot be judged by the number of registered factory bakehouses. The erection of new works, and the expansion of existing bakeries, was a noticeable feature in 1934. During the year a large new biscuit factory was opened in the City, and additions to premises took place in five instances. One new model bakery has been provided on a particularly hygienic and efficient scale. Of brick and steel construction, the internal finish from floor to ceiling is of white glazed tiles, lending itself to easy cleaning, while the ovens are faced with white glazed brickwork. The toilet facilities for the employees are on the same excellent scale as the rest of the building. An ambitious reconstruction of another factory bakehouse on the north side of the City was completed during the year. This scheme involved the vacating of the premises for a period of almost a year, temporary occupation of another bakehouse serving the firm during that time. The whole building, with the floors and built-in ovens, was demolished, leaving four bare walls. An additional storey was then added, and the entire building re-modelled. The extent of the work entailed may be visualised when it is stated that the cost was £13,000. The new structure has been designed and equipped for ideal working conditions, light and air being plentiful, and increased floor space provided. The improvements have made this bakery one of the finest in the City.

One underground bakehouse was discontinued during the year. These premises were vacated on account of the site being purchased for the erection of new buildings. Another underground bakehouse was extensively re-conditioned, at the request of this Department, involving the building of a new w.c. apartment, renewal of windows, repair of floors, provision of "main" water supply, and the installation of electric lighting throughout the premises.

Another improvement in hygiene of modern times, namely, Edinburgh-made wrapped bread, made its advent in the City during July 1934. At first bakers installed only a small plant for dealing with the wrapping, because the probable response to the innovation was uncertain. The new departure is being continued, but in a modified degree. As far as can be gathered it does not seem to have become popular with the public in Edinburgh to any great extent. This may be accounted for by the fact that about six different Glasgow firms daily import their wrapped bread into the City, and did so for quite a long time before local firms took up "wrapping." The opinion may also have been held that there was no vital necessity for wrapping as many of the bakers apparently consider that their bread was being delivered under clean and hygienic conditions. However, the practice is likely to be continued locally; those firms having started it are not likely to give up. The advantages of wrapped bread over unwrapped do not need to be emphasised. Too much care cannot be given to the hygienic handling of food.

SANITARY DEPARTMENT,  
PUBLIC HEALTH CHAMBERS,  
JOHNSTON TERRACE,

To EDINBURGH, May, 1935.

*The Department of Health for Scotland and  
The Right Honourable the Lord Provost,  
Magistrates and Council of the City of Edinburgh.*

MY LORD PROVOST, LADIES AND GENTLEMEN,

I have the honour to present the Annual Report of the Sanitary Department of the City of Edinburgh for the year 1934.

### HOUSING.

Considerable advance was made during the year with the programme of slum clearance and it is worthy of note that since 1923, when the Corporation Schemes were begun, well over 5,000 houses involving a population of over 14,000 have been dealt with under the various Housing Acts.

**Housing (Scotland) Acts, 1919-1925—Improvement Schemes.**—During the year good progress was made towards the completion of St. Leonard's (Second Section) Improvement Scheme. The House-letting Department, despite many difficulties, including the arranging of transfers and "filtration" for old persons and persons living alone, succeeded in transferring a considerable number of tenants from the insanitary dwellings to the new re-housing areas. Many of the areas in the Improvement Scheme are now completely vacated and in the Richmond Place—North Richmond Street—Pleasance Area, which was the largest in the Scheme, many of the buildings are demolished and new tenements are rapidly being erected on the site. The new tenements are of very pleasing appearance and indicate the improvement which will take place in this Area when it is completely developed.

It is interesting to recall what has been done under the Housing Acts of 1919-25, and the following shows the number of houses dealt with under Improvement Schemes and by individual Closing Orders :—

<i>Improvement Scheme.</i>	<i>No. of Houses dealt with.</i>	<i>Population.</i>
1. Cowgate-Grassmarket, 1923 . . . .	630	1,429
2. Leith, 1924 . . . . .	678	2,444
3. Canongate-Corstorphine, 1927 . . . .	293	556
4. St. Leonard's (1st section), 1927 . . . .	752	2,619
5. St. Leonard's (2nd section), 1929 . . . .	1,544	5,375
Totals . . . . .	3,897	12,423
Closing Orders . . . . .	272	1,000
Totals . . . . .	4,169	13,423

**Housing (Scotland) Act, 1930—Clearance Areas.**—A commencement was made with the Local Authority's "Five Years' Programme" and two clearance areas were dealt with during the year. The first was the Ann Terrace, etc., Clearance Area which comprised 87 houses, 18 of which were vacant, and affected a population of 301 persons. Some of the owners in Areas A and C lodged objection and





ANN TERRACE CLEARANCE AREA "A."



ANN TERRACE CLEARANCE AREA "C."  
(REAR VIEW.)



TRAFALGAR LANE CLEARANCE AREA.



TRAFALGAR LANE CLEARANCE AREA.  
(REAR VIEW.)

an Inquiry was held by the Department of Health on 24th June, 1934, when the objectors were heard and the properties visited. The Clearance Orders, however, were confirmed by the Department of Health without modification. Areas A and C were confirmed on 12th September, 1934, and Area B on 3rd August, 1934. Most of the tenants in these areas have been transferred to the re-housing area in Craigentenny, and the demolition of two of the tenements has already commenced.

The second area, known as the Trafalgar Lane Clearance Area, comprised 152 houses, 3 of which were vacant, and affected a population of 571. Objections were lodged by several owners in Areas A and C and, in consequence, an Inquiry was held by the Department of Health on 2nd November, 1934. The Department confirmed the Orders for Areas A, B and D without modification, Area A being confirmed on 27th December, 1934, and Areas B and D on 26th November, 1934. Area C was confirmed on 31st December, 1934, with one slight modification, namely, the transference of one house from Part I. of the Schedule to Part III.

Two other areas are in process, namely, the Wilson's Park, etc., Portobello Clearance Area, which will deal with 69 houses and will affect a population of 253, and the New Broughton, etc., Clearance Area, which will deal with 108 houses, 42 of which are vacant, and will affect a population of 225.

In the clearance areas dealt with, it was found that most of the houses were built back-to-back; the ground flat houses were damp; and the apartments were poorly lighted due to the close proximity of other buildings. The houses were all, more or less, suffering from disrepair, and many of the common lobbies, from which the houses were entered, were dark. Very few of the houses had a water-closet within the house, and, in the majority of tenements, one water-closet was used in common by the occupants of two or more houses. These water-closets were usually situated either in the common lobbies or in the staircase. A considerable number of houses were found to be bug-infested, and arrangements had to be made to free the furniture and furnishings from vermin while the tenants were being transferred to the new housing areas.

**“Individual” Uninhabitable Houses.**—In addition to the houses in clearance areas, 408 “individual” houses throughout the city were dealt with either by means of Demolition Orders or Closing Orders. Many of these houses were basement or “area” houses of which there is a considerable number in the city, especially on the north side. This type of house is generally found to be quite unsuitable for occupation by a family. The houses are usually entered from an area which is reached by an outside stair and the apartments are, as a rule, considerably overshadowed by the retaining wall of the pavement and roadway in front. The buildings in which this type of house is found are usually without damp-proof courses, and, as many of the apartments have at least one wall in close proximity to and below the level of the adjoining ground, evidence of dampness is of common occurrence. In some instances, it was found that the water supply was obtained from a tap situated in the area and that the water-closet which was very often used in common was situated in a dark unventilated cellar below the street pavement.

The following returns submitted to the Department of Health show the number of houses dealt with:—



REPORT for the year ended 31st December 1934, on proceedings taken as regards the Inspection, Improvement, and Demolition and Closure of Dwelling-Houses.

## HOUSING (INSPECTION OF DISTRICT) REGULATIONS (SCOTLAND), 1928.

1. Number of dwelling-houses inspected . . . . .	867
2. Number of dwelling-houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation . . . . .	804

## HOUSING (SCOTLAND) ACT, 1925.

3. Number of cases where intimations were given under Section 20 (1) as to insufficient water-closet accommodation :—	
(a) Cases where requirements complied with by owners . . . . .	(a)
(b) Cases where works carried out by Local Authority after failure of owners to do so . . . . .	(b)   †Nil.
(c) Cases still pending . . . . .	(c)
4. Number of houses of (a) one apartment, and (b) two apartments, for the erection of which the consent of the Local Authority has been given in terms of Section One hundred and eleven . . . . .	(a)   †Nil. (b)

## HOUSING, TOWN PLANNING, ETC. (SCOTLAND) ACT, 1919.

5. Number of cases where notices were served under Section 40 (1) to provide dwelling-houses with water supply :—	
(a) Cases where requirements complied with by owners . . . . .	(a)
(b) Cases where works carried out by Local Authority after failure of owners to do so . . . . .	(b)   †Nil.
(c) Cases still pending . . . . .	(c)

## HOUSING (SCOTLAND) ACT, 1930.

6. Number of dwelling-houses in respect of which notices were served under Section 14 (1)	Nil.
7. Number of dwelling-houses rendered fit for human habitation following on notices under Section 14 (1) . . . . .	Nil.
8. Number of dwelling-houses in respect of which work has been done by the Local Authority under Section 15 (1) . . . . .	Nil.
9. Number of dwelling-houses in respect of which in terms of Section 17 a demolition order or closing order under Section 16 (3) has been substituted for a notice under Section 14 (1)	Nil.
10. Number of dwelling-houses in respect of which notices were served in terms of Section 16 (1) . . . . .	408
11. Number of dwelling-houses referred to in 10 :—	
(a) Which have been rendered fit for human habitation . . . . .	(a) Nil.
(b) In respect of which undertaking has been given that the house will not be used for human habitation until it has been rendered so fit . . . . .	(b) 131
(c) In respect of which demolition orders* have been made under Section 16 (3) . . . . .	(c) 184
(d) In respect of which closing orders have been made under Section 16 (3) and (4) . . . . .	(d) 84
12. Number of dwelling-houses in respect of which closing orders have, in terms of Section 16 (3), been determined by the Local Authority, following upon the houses having been rendered fit for human habitation . . . . .	Nil.
13. Number of houses in respect of which advances have been made in terms of Section 34 towards cost of repairs and amount so advanced . . . . .	Nil.

\*If permission to reconstruct a building has been granted, the number of houses existing prior to the reconstruction should be stated (see in this connection, sub-section (3) of Section 49 of the Housing (Scotland) Act, 1930).

†Applies only to County Districts.

*Note.*—Any general information or observations to the character of defects usually found to exist, as to the extent to which overcrowding was found to prevail and the steps taken to remedy it, or as to the work of inspection generally, should be entered in the space below :—

The conditions found were those usually associated with old houses, viz.:—

Dampness, overshadowing, general disrepair of structure, over-subdivision, inadequate sanitary accommodation, and infestation by bugs and other vermin.



# HOUSING (SCOTLAND) ACT, 1930.

## UNHEALTHY AND INSANITARY AREAS.

Position at 31st December, 1934.

(1)	Number of Dwelling Houses Demolished.		Number of Dwelling-Houses Closed.	Number of Dwelling-Houses Made Fit.	Number of Persons Displaced.		Number of Dwelling-Houses Vacated but not Demolished.		Number of Persons Displaced from Houses in Columns (8) and (9)
	Unfit Houses. (2)	Other Houses. (3)			Unfit Houses. (4)	From Houses in Columns (2), (3) and (4). (6)	To Abate Overcrowding. (7)	Unfit Houses. (8)	
Under Part I. of Act :									
(A) Clearance Areas.									
(i) Lands within the Area . . . . .	Nil.	Nil.	...	...	Nil.	...	20	4	112
(ii) Lands acquired under Section 3 of Act ..	...	Nil.	...	...	Nil.	...	...	Nil.	Nil.
(B) Improvement Areas									
(1)	Number of Dwelling Houses Demolished. (Section 16) (2)		Number of Dwelling-Houses Closed. (3)	Number of Persons Displaced from Houses in Columns (2) and (3). (4)	Number of Dwelling-Houses Made Fit. (Sections 14-16). (5)		Number of Dwelling-Houses Vacated, but not yet Demolished. (6)	Number of Persons Displaced from Houses in Column (6). (7)	
Under Part II. of Act :									
(C) Unfit houses not included in Clearance Areas or Improvement Areas . . . . .	114		467	2,214	...	...	155		588

**Bug-Infestation of Houses.**—The infestation of new houses by bugs caused the Local Authority much concern. During the year, the houses and household effects of 1,705 prospective Corporation tenants were examined by the Inspectors of this Department, and 259 or 15·2 per cent. of that number were found to be bug-infested. As a first step in prevention, the tenants were instructed as to the measures which should be taken to prevent transference of the vermin in their furnishings and furniture, and arrangements were made for the removal of the bedding to the steam disinfecter. These measures, however, were not entirely successful, and the Local Authority decided to fumigate the furniture, etc., from bug-infested houses by means of hydro-cyanic acid gas. This scheme was put into operation on 7th September, 1934, and, from that date until the end of the year, 78 fumigations were carried out.

When a house was found to be bug-infested, the tenants were instructed as to the measures to be taken and arrangements were made for their removal. On the day of removal, *every* article in the house with the exception of bedding—which was taken for steam disinfection—was removed in the special pantechicon to the fumigation hut at Powderhall and there subjected to hydro-cyanic acid gas for a period of three to four hours. At this hut, the articles were thoroughly aired after fumigation and, thereafter, delivered direct to the new address.

The tenants were encouraged to destroy, or rather discard, badly infested articles and, no matter how dilapidated these might be, they were all treated in the van and, after fumigation, dumped at the destructor and subsequently burned. This precaution was taken to prevent tenants discarding furniture and furnishings by disposal to second-hand dealers or some other person's house and so start a fresh infestation. In this respect, it was found that, from the 78 houses dealt with, 275 articles were destroyed, including 53 mattresses, 43 bedsteads, 34 spring and wire mattresses, 21 pillows, etc., 27 chairs, 6 tables, 9 dressers, 23 pictures and 10 rolls of linoleum.

So far, the scheme has been a great success and in no instance has a complaint been made of the presence of bugs in the new houses after the furniture has been fumigated. Inspections have failed to reveal any traces of bugs, and many of the tenants state that they are now able to live in comfort after years of misery with many sleepless nights from these insects.

The success of the scheme is due, in no small measure, to the close co-operation between this Department and the House-letting Department.

The bug problem is one in which this Department and house factors are keenly interested, and every possible assistance is given to free infested houses from this pest. Old properties are difficult to deal with owing to long-standing infestation, but many tenants, possibly with the exception of poor people enfeebled by age and infirmity, require to be awakened to the fact that the use of soap and water and the expenditure of a little energy on their part will do much to get rid of the vermin, and that an apathetic attitude only encourages their breeding. It is inconceivable to believe that some tenants can readily disclose the presence of the vermin behind wall-papers and in their bedding and bedsteads, and yet passively accept their presence. It must not necessarily mean, however, that the presence of bugs in a house is always an indication of laziness or dirty habits on the part of the occupier. Many clean houses in which the housewife



PANTECHNICON REMOVING FURNITURE FROM OLD HOUSE.



PANTECHNICON DELIVERING FURNITURE TO NEW HOUSE.  
(AFTER FUMIGATION.)





PREPARING FOR GASSING WITH H.C.N.



PANTECHNICON UNDER GAS.



takes a pride in her domestic duties become infested from a neighbouring house or through the purchase of second-hand furniture. In any tenement which is known to be bug-infested, the tenants would be well advised to strip off all wall-paper and treat their walls with one of the modern washable distempers. The "pockets" left by amateur paper-hangers form ideal nesting and breeding places for the vermin.

In addition to the houses dealt with, when the tenants were removing to new houses, 426 other houses were found to be bug-infested. In dealing with these, 34 beds were removed to the Disinfecting Station for treatment, and 179 apartments were stripped of wall-paper and the walls thereafter treated with an insecticide.

In connection with this problem, it is hoped that a scheme will be devised in the near future, in co-operation with the house factors, whereby all known bug-infested houses, as they become vacant, will be freed from infestation before re-letting.

**Supervision of Re-housing Areas.**—The houses in the re-housing areas are visited regularly by sanitary inspectresses with a view to having the houses kept clean and in proper order and also to prevent overcrowding and sub-letting. The improvement in the conditions both inside and outside the houses continues and the occupiers seem to be appreciating their new environment.

The following are a few of the remarks heard by the inspectresses on their visits :—

"A world of difference" is a very common phrase. "I can see something for my work now" is another. In a family of seven who, until recently, had occupied a single apartment and are now housed in a three-apartment house, the mother expressed herself thus, "This is a new lease of life ; we can breathe and the children can play." An elderly woman, pointing to the window, said, "Look at the view ; I am happy, and, at first, I did not want to come."

Altogether, 16,901 visits were made during the year.

**Housing Repairs and Improvements.**—It was not possible during 1934 to serve any notices under Section 14 of the Housing (Scotland) Act, 1930, as the difficulties associated with many properties would necessitate the provision of alternative accommodation for the tenants, and it is doubtful if much can be done under this Section until Local Authorities are empowered to build new houses with the assistance of a Government Grant. Many minor repairs, however, were executed on houses by owners at the request of the Department.

**Rural Housing Improvements.**—Under the Housing (Rural Workers') Acts, 1926 and 1931, applications for financial grants were made during the year by the owners of 12 farm and other rural cottages. All were granted and improvements were proceeded with immediately, including the provision of bathrooms, sculleries, drainage, improved lighting and repairs to floors, walls, roofs, etc.

Farm workers' houses in the suburban areas were visited by the sanitary inspectresses in order to ascertain the state of cleanliness in the dwellings. The conditions were usually found to be satisfactory and, in the few instances which were not up to standard, re-visits showed a marked improvement.

**“Ticketed” Houses.**—Although the Slum Clearance Schemes promoted by the Local Authority have reduced the number of small houses in the city, a considerable number still remain. These “ticketed” houses are inspected regularly by the Sanitary Inspectresses, and 10,394 visits were made during the year.

### INCREASE OF RENT, ETC., ACTS.

Applications were received from the tenants of three houses for certificates in terms of the Rent and Mortgage (Restrictions) Acts, 1920-33, that their houses were not in all respects in a reasonable state of repair. The defects complained of, however, were not sufficient to warrant the granting of certificates, and, on the owners' attention being drawn to the matter, all necessary repairs were carried out.

### OVERCROWDING.

The number of overcrowding cases on the records of the Department was 1,809, being a decrease of 266 compared with last year. Of the total number, 602 were new cases.

The foregoing number, however, must not be taken as representing all the overcrowding in the city. It will be recalled that after three experimental surveys in different districts of the city, it was estimated that there were approximately 3,000 houses overcrowded according to the cubic space standard. 7,500 had a want of proper separation of the sexes and 10,500 had more than two persons per room.

While much of the overcrowding was caused by the size of the family in residence, in 229 cases, it was either due to or aggravated by the keeping of lodgers or the sub-letting of rooms to other families.

Of the 1,809 overcrowded houses, 902 were of one apartment, 879 of two apartments, and 28 of three apartments and over.

In 152 instances, the available space per person had been reduced to below 200 cubic feet, being less than half of what has been recognised as a very low standard, namely, 400 cubic feet, and, in one case, the available space had been reduced to the extremely low figure of 72 cubic feet per person.

During the year, 613 of these cases were abated and, of this number, 232 were in one-apartment houses, 271 in two-apartment houses, 9 in three-apartment houses and 101 were instances of sub-letting of rooms or keeping of lodgers.

Recommendations were made to the House-letting Department in 702 instances where overcrowding was serious and where there was a lack of proper sex-separation. A considerable number of tenants in overcrowded houses were provided with new Corporation houses as a result of these recommendations.

The Housing Bill, at present before Parliament, will have very far-reaching effects on overcrowding in the city. The standards of overcrowding are being raised and, instead of the cubic space per person standard, overcrowding will be judged on a

maximum number of persons per house, a minimum floor area per person, the proper separation of the sexes, and a maximum number of persons per room.

One of the clauses in the Bill makes it compulsory for a Local Authority to carry out an overcrowding survey in their District, and this in Edinburgh will involve the inspection of over 100,000 houses which have a rental of £45 and under.

So far, the extent of overcrowding in the city has been estimated by applying ratios obtained from experimental surveys in small areas but, after this new survey is carried out, complete records will be kept and the full extent of the problem known. A large amount of extra labour will be involved, and it is hoped that it will lead to the ultimate abolition of overcrowding which is one of the blots on the records of Scottish Housing.

## GENERAL SANITATION.

**Nuisances and Sanitary Improvements.**—The activities of the Department were largely absorbed in dealing with structural defects and nuisances common to old tenemental properties. Age, sub-division, communal occupancy and mutual ownership were the chief contributory factors giving rise to the conditions requiring attention. Those properties have been subjected to the wear and tear of generations and are a prolific source of complaint.

Within the houses the floors, doors, windows, plaster-work, grates and hearth-stones were the structural parts which called for repair or renewal, and externally the roofs, chimneys, rhones, down-pipes, drains, etc., required attention.

The common use of sanitary conveniences by several families in tenemental properties leads to much abuse and considerable nuisance, and tradesmen are frequently called upon to attend to defective appliances. The neglect of cleanliness of sanitary conveniences, lobbies, stairs, etc., used in common was frequently the subject of complaint, while many of the other nuisances referred to the Department by tenants were unnecessary noise, nuisances due to cats, or other animals, the presence of rats, mice, or other vermin, the casting of garbage from windows, accumulations of rubbish, offensive smells, smoke, etc.

In the past much slum property has been created and many properties have been depreciated by the sub-division of houses—that is by letting as separate dwellings the various apartments of a flat or house originally intended for the accommodation of one family, invariably without adequate water, sink and water-closet accommodation. In recent years advantage has been taken of the scarcity of houses by persons acquiring commodious flats and villas and rack-renting them in the manner indicated. With a view to preventing this evil a clause was inserted in the Edinburgh Corporation (Streets, Buildings and Sewers) Order, 1926, and under this section a case was submitted to the Dean of Guild Court last year. The particulars of this case were as follows:—A top flat house in Warrender Park Road consisting of nine apartments and rented at £45 yearly was let to five separate families—four occupying two rooms each and one a single apartment—at an aggregate weekly rent of £3 9s. 6d. or yearly £180 14s.0d. The house contained only one water-closet, one sink and tub, and one wash-basin and bath. The needs of the people were exploited in this case to such an extent that a profit



of over £130 yearly was being made. On the matter being submitted to the Dean of Guild Court held on the 15th November, 1934, the tenant was fined a modified penalty of £5 5s. 0d., with expenses, and it is hoped that this will prove a deterrent to others.

Much of the depreciation on house property could be prevented by timely attention to repairs. Structural defects or insanitary conditions are often allowed to continue by the owners until necessity compels the tenant to protest to the Local Authority. In other cases, the faulty conditions come to the notice of the Department by official housing surveys, and where improvements are called for, it frequently happens that the necessary work is delayed owing to the difficulty of the co-owners, for financial and other reasons, in agreeing to specifications and estimates.

By the exercise of reasonable care on the part of some tenants, and by the better control of children in certain districts, much could be done to prevent unnecessary wear and tear of property. The maintenance of a higher standard of repair and the introduction of sanitary improvements, however, are essential if many properties are to escape being listed as fit subjects for closure under the Housing Acts.

Of the total number of insanitary conditions dealt with, 5,748 or 41 per cent. had reference to the introduction, renewal or repair of drains, sanitary appliances, etc., the repair of structural defects, the removal of nuisances, and the protection of domestic water supplies ; 3,556 or 25 per cent. required the painting of common staircases and the regulating or washing of common stairs, passages, etc. ; 2,871 or 21 per cent. necessitated the removal of accumulations of rubbish, garbage, manure, or other offensive matter ; and 1,769 or 13 per cent. were of a miscellaneous nature. In all, 13,944 insanitary conditions were dealt with by the Department, and of these, 10,082 were discovered by the Inspectorial Staff, whilst 3,744 were intimated by citizens, and 188 notified by other municipal departments. These nuisances required for their removal the service of 11,452 intimations and notices on owners and tenants under various Statutes.

**Sanitary Conveniences Used in Common.**—The undernoted table shows the number of sanitary conveniences used in common by the occupiers of two and more houses. The number of dry closets so used is 46. This is a decrease of 37 compared with last year. The number of water-closets and sinks used in common was reduced by 361 and 91 respectively, due to the demolition and closing of houses under the various slum clearance schemes, and to improvements effected at other properties. The number of houses without sink and water supply within the house and without the use of a common sink has been reduced by 94.

During the last decade the Department have reduced the number of water closets used in common by 1,323 or 18 per cent., the number of sinks used in common by 345 or 32 per cent., the number of houses without sink or water supply within the house and without the use of a common sink by 473 or 51 per cent., the number of dry closets by 114 or 71 per cent., the number of ashpits used in common by 40 or 69 per cent., and abolished all the privy middens. In all, 2,305 or 24 per cent. of the sanitary conveniences used in common have been reduced during that period and it is anticipated that much greater progress will be made within the next few years.



**SANITARY CONVENIENCES USED IN COMMON.**

	Year.	Number used in common by the Tenants of										Total Number of Conveniences.	Total Number of Houses.
		2 Houses.	3 Houses.	4 Houses.	5 Houses.	6 Houses.	7 Houses.	8 Houses.	9 Houses.	10 Houses.	11 and more Houses.		
Common Waterclosets . . . . .	1925	4,561	1,572	951	148	67	27	30	7	...	...	7,363	19,276
	1934	4,078	1,234	628	77	18	2	3	Nil.	...	...	6,040	14,901
Common Sinks . . . . .	1925	391	366	228	61	21	5	6	...	...	...	1,078	3,306
	1934	283	249	150	31	15	5	Nil.	...	...	...	733	2,193
Number of Houses without sink or water supply within the house and without the use of a common sink . . . . .	1925	...	...	...	...	...	...	...	...	...	...	...	936
	1934	...	...	...	...	...	...	...	...	...	...	...	463
Dry Closets . . . . .	1925	131	18	9	2	...	...	...	...	...	...	160	362
	1934	42	4	Nil.	Nil.	...	...	...	...	...	...	46	96
Privy Middens . . . . .	1925	...	...	...	...	...	...	1	...	...	9	10	152
	1934	...	...	...	...	...	...	Nil.	...	...	Nil.	Nil.	Nil.
Ashpits . . . . .	1925	18	12	11	6	5	1	2	1	2	...	58	228
	1934	9	4	5	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	...	18	50

## VERMIN REPRESSION.

In addition to the measures adopted for bug infestations referred to under Housing, action was taken to deal with other forms of vermin including rats, mice, cockroaches, fleas, lice, etc.

**Rat Destruction.**—The enquiries into the rat infestations lead to many surprising discoveries and entirely unsuspected sources of origin are often disclosed. During the year, for example, a property in the eastern district of the City became badly infested and after all the possible sources of infestation had been carefully investigated, the problem remained unsolved. An examination of the sewer and private drain connections was made, when a partial collapse of the sewer and private outlet drains was revealed. On these defects being attended to, the infestation ceased.

In another case on the north side of the City several properties were invaded by rats. The source again caused difficulty in location. An exhaustive search brought negative results until, as a last resort, a neighbouring sewer was surveyed and a defect discovered near the affected properties. This defect, no doubt, had allowed the rats to pass into the properties, but despite the repair to the sewer, there was no abatement of the nuisance. Further investigations were made when it was found that the rats had found lodgment in the neighbouring sub-soil drains. Gratings were fitted to the outlets of the sub-soil pipes and the invasion terminated.

During the year 380 complaints were received regarding premises being infested by rats and mice. Repeated visits were made and the various measures taken resulted in 328 premises being cleared of the vermin.

**Rat Week.**—As in previous years the Local Authority co-operated with the Department of Agriculture in an intensive campaign for rat destruction during Rat Week and very satisfactory results were obtained.

**Verminous Children.**—During the year 272 cases were notified by the Education Officials and in connection therewith 10 beds and 329 sets of personal clothing were disinfected and 287 children were bathed at the City Disinfecting Station.

## LODGING HOUSES.

**Common Lodging-Houses.**—Legal proceedings were instituted against an owner of premises on the north side of the City for conducting a common lodging house without having the premises approved and registered by the Local Authority. Some time prior to court proceedings being taken, the owner applied for the registration of the premises, but the application was refused as the premises were considered to be unsatisfactory. Despite this refusal the premises continued to be used as a common lodging house. Legal proceedings were threatened and the owner's legal agents wrote stating that the premises were not being used as a common lodging house, but as a boarding house. Further visits confirmed the view that there was no change in the conduct of the business as a lodging house. The owner therefore was finally warned and in reply a letter was received from his law agents stating that the premises had now been re-let as a board residence. The premises were re-visited and Inspectors were informed by the new tenant that

the charge for board and lodging was £1 per week. According to other enquiries the rates were 12s. 6d. and 8s. 9d. per week, or 1s. 3d. per night, but no reliable evidence could be obtained nor could any evidence of the provision of meals be observed. To obtain direct evidence two reliable witnesses were sent by the Department to the lodging house for one night's residence. The lodging house rate of 1s. per night was charged and their residence overnight confirmed the fact that no meals were provided for the inmates. The premises had accommodation for 33 lodgers in all, and there were 18 lodgers in residence at the time of these proceedings. Evidence was led in court and a fine of £2 imposed.

There was no change in the number of common lodging houses which, at the end of the year, was 15 with accommodation for 1,966 persons. One lodging house in Leith with accommodation for 106 men was closed and taken off the register as being unsuitable, while premises for 38 men, formerly registered as "Houses-let-in-lodgings" were registered as a common lodging house after structural improvements were effected.

Baths and additional lavatory and water-closet accommodation were introduced in one of the lodging houses, and in another the old wooden floors in three water-closet apartments and two bathrooms were lifted and new concrete floors laid, dadoes tiled, three new wash-down water-closets substituted for the old wash-out closets, and a new bath and ablution sink introduced in one of the bathrooms.

**Farmed-Out Houses.**—The number of farmed-out houses on the register is similar to last year, namely, 57 with accommodation for 205 persons.

**Houses Let-in-Lodgings.**—At January, 1934, there were 13 houses let-in-lodgings on the register, with accommodation for 571 persons. During the year, 6 houses with accommodation for 163 persons were removed from the register, 5 of the businesses being discontinued and the other transferred to the register of common lodging houses. At the end of the year, there were 7 houses let-in-lodgings on the register with accommodation for 408 persons.

## ACCOMMODATION FOR SEASONAL WORKERS.

During the year 300 seasonal workers were employed on 16 farms situated in the Liberton, Colinton, Corstorphine and Cramond districts and visits were paid both before and during the occupation of the special accommodation provided in order to see that the Bye-laws were being observed. These provide for separate sleeping apartments for each sex, the prevention of over-crowding, the proper lighting and ventilation of the accommodation, the provision of water, adequate sanitary conveniences, ablution facilities, etc. Inspection showed that the various premises were kept in a clean and sanitary condition.

## PLACES OF PUBLIC ENTERTAINMENT.

Inspection of picture houses, theatres and other places of entertainment was carried out by day and night to ascertain that they were kept in a reasonably hygienic condition. Visits made in the evening were for the special purpose of testing the efficiency of the heating and ventilation systems. In a few cases it was found that the temperature



maintained in the buildings was too high. This was particularly noticeable in the balconies where the temperatures were found to be considerably higher than in the lower parts of the house, due to the warmer air rising to the higher levels. In one case it was necessary to instal additional ventilators and exhaust fans above the balcony and in subsequent tests conditions were found to be quite satisfactory. It was found generally that satisfactory attention was being paid to cleanliness and other sanitary matters

### SMOKE ABATEMENT.

The benefits to be derived from sunshine and fresh air are now well known and participation in the open air cult is increasingly pursued. One gratifying feature of this is the desire of so many young people to seize every opportunity of getting as far afield along the highways and byways as physical and economical resources will permit.

Paradoxically the pollution of the atmosphere in our industrial centres is a common daily experience which can only be attributed to the acceptance of smoke as a necessary evil, to ignorance of the elementary principles of combustion and their scientific application to industrial plant, or to a lack of appreciation of the utility and economic advantages of smokeless forms of power. The evil effects of smoke should require no emphasis. It not only seriously pollutes the atmosphere but it also reduces the quantity of sunshine as well as obstructs the day-light. Experiments have shown that in our great cities fully 40 per cent. of the light is shut out by this cause. Records over a considerable period have proved that the death-rate decreases as sunshine increases, indicating that the amount of sunshine is one of the factors governing health.

The effect of smoke on buildings and furnishings is also quite apparent. Apart from the deposit of soot which blackens and disfigures buildings, a corrosive action of the stonework occurs on many buildings due to the effect of sulphur produced from coal and this results in the face of the stonework flaking off. A similar action is produced on ironwork that is not constantly cleaned and painted. Vegetation also suffers from sulphur impurities which poison the soil. The green leaves are soot-laden and suspended smoke in the air deprives plant life of the necessary sunshine and light so essential to growth.

For a number of years the Department has been co-operating with the Atmospheric Pollution Research Committee of the Department of Scientific and Industrial Research in order to ascertain the extent of atmospheric pollution within the City. For this purpose three atmospheric pollution deposit gauges are stationed as follows:—One at Leith Links, one at Bruntsfield House, and one at West Princes Street Gardens. Statistics for the year ending December, 1934, show that the mean monthly deposits in total solids per square mile were 15·665 tons in Leith, 13·639 tons in Bruntsfield, and 24·323 tons in West Princes Street Gardens, averaging 17·875 tons, which is equivalent to approximately 4,000 tons of deposits in total solids falling upon the built-up area of the City for the year.

Efforts have been made to assess the monetary cost of smoke to cities and, whilst it is quite impossible to obtain any definite figures, approximate estimates, published by the National Smoke Abatement Society, inclusive of inefficient combustion, damage



to buildings, household goods, merchandise, etc., put the annual cost of smoke to Edinburgh at £567,000.

### Monthly Records of Deposit.

Month.	Station.	Millimetres of Rainfall.	Total Insoluble Matter.	Total Soluble Matter.	Total Solids.	Total Solids.
			Metric Tons. per Sq. Kilometre.	Metric Tons per Sq. Kilometre.	Metric Tons per Sq. Kilometre.	English Tons per Sq. Mile.
January .	Leith Links . . .	39.08	2.31	2.02	4.33	11.10
	Bruntsfield House	46.03	2.21	1.38	3.59	9.20
	W. Princes St. Gds.	42.83	6.04	1.46	7.50	19.20
February	Leith Links . . .	...	...	...	...	{ Analysis not possible due to lack of rain.
	Bruntsfield House	...	...	...	...	
	W. Princes St. Gds.	...	...	...	...	
March .	Leith Links . . .	66.56	4.73	3.34	8.07	20.69
	Bruntsfield House	75.74	4.94	5.31	10.25	26.26
	W. Princes St. Gds.	70.82	16.68	4.95	21.63	55.37
April .	Leith Links . . .	87.35	2.92	4.20	7.12	18.22
	Bruntsfield House	108.00	3.59	4.52	8.11	20.76
	W. Princes St. Gds.	97.46	7.06	4.87	11.93	30.54
May .	Leith Links . . .	31.39	3.46	2.63	6.09	15.60
	Bruntsfield House	31.86	4.86	1.54	6.40	16.40
	W. Princes St. Gds.	31.22	8.67	1.37	10.04	25.68
June .	Leith Links . . .	54.68	5.28	2.85	8.13	20.83
	Bruntsfield House	70.61	4.64	3.11	7.75	19.86
	W. Princes St. Gds.	68.24	9.73	2.86	12.59	32.21
July .	Leith Links . . .	63.05	4.05	2.14	6.19	15.85
	Bruntsfield House	67.23	3.89	1.74	5.63	14.41
	W. Princes St. Gds.	58.50	6.57	2.10	8.67	22.20
August .	Leith Links . . .	87.49	11.21	1.86	13.07	33.46
	Bruntsfield House .	87.48	2.55	2.28	4.83	12.36
	W. Princes St. Gds.	84.24	6.34	2.52	8.86	22.68
September	Leith Links . . .	43.47	2.89	1.57	4.46	11.42
	Bruntsfield House	46.17	2.85	1.47	4.32	11.06
	W. Princes St. Gds.	46.50	6.06	1.48	7.54	19.30
October .	Leith Links . . .	61.82	4.82	2.23	7.05	18.04
	Bruntsfield House	81.14	2.50	2.75	5.25	13.44
	W. Princes St. Gds.	72.11	6.32	3.58	9.20	25.34
November	Leith Links . . .	20.93	3.11	1.59	4.70	12.03
	Bruntsfield House	25.04	1.94	1.35	3.29	8.42
	W. Princes St. Gds.	23.09	5.93	1.56	7.49	19.17
December	Leith Links . . .	37.13	2.04	2.16	4.20	10.75
	Bruntsfield House	72.02	1.90	2.59	4.49	11.49
	W. Princes St. Gds.	54.44	5.17	2.72	7.89	20.19

**Public Complaints.**—Sixty-four complaints were received during the year. These were mainly concerned with smoke from the smaller types of steam boilers, heating stoves and central heating boilers. By substituting coke for coal and in one or two cases by heightening the chimneys the complaints were satisfactorily adjusted.

**Factories and Workshops.**—Experience proves that mechanical stoking of fuel is one of the most effective methods for the prevention of smoke. Many large boiler installations in the City are now provided with these appliances and this method of stoking is also being extensively applied to central heating boilers. During the year 600 visits of inspection and 435 extended observations were made of various chimneys. In 41 cases it was necessary to intimate to owners excessive emissions of smoke. Whilst in the majority of cases greater care in stoking resulted in improvement, remedies of a more permanent nature were also carried out, and the following is a tabulation of the improvements effected :—

New steam boilers installed, including replacement of old boilers . . . . .	8
Steam boilers replaced by electric power . . . . .	4
Secondary-air smoke-preventing apparatus fitted to steam boiler furnace . . . . .	1
Mechanical stokers fitted to steam boiler . . . . .	1
Mechanical stokers fitted to central heating boilers . . . . .	17
New chimneys erected or existing ones heightened to increase their draught . . . . .	8
Furnaces in which anthracite, coke or non-bituminous fuel has been substituted for coal (This includes garages, institutions, laundries, and workshops.)	25
	—
	64
	==

**Railways.**—Railway stations and depots were kept under close observation. It was found that care continued to be exercised particularly at the centrally situated stations to prevent excessive emissions of smoke from engines.

**Steam Road Wagons.**—There are now only a few of these vehicles employed within the City area, and on one occasion only was it necessary to take exception to the smoke emitted.

**Smoke Abatement Class.**—Much can be done to prevent the formation and emission of smoke from chimneys if those in attendance on boiler and other furnaces possess a knowledge of the principles of combustion and adopt proper methods of stoking. With this end in view, a class on Smoke Abatement, conducted by the Smoke Abatement Inspector, was again held in the Heriot Watt College during the winter months. The enrolment showed an increase over last year and the lectures were well attended. The class visited the Electric Power Station, Portobello, and the Gas Works, Granton, where details of the plants used in the generation of steam were explained.

## OFFENSIVE TRADES.

The offensive trades registered within the City comprised 3 tanners, 8 hide and skin factors, 1 gut scraper, 1 glue and size maker, 2 skinners, 1 soap boiler, 2 tripe cleaners, 6 manure manufacturers and 2 tallow melters, making a total of 26. One tripe cleaning business closed down during the year and this reduced the number of tripe cleaners to two. Inspections showed that the provisions of the Bye-laws requiring the prevention of offensive effluvia, the inoffensive disposal of obnoxious waste, the lime-washing of walls, the cleansing of floors, utensils, etc., and the thorough flushing of the drains were being observed.

## FOOD PREMISES.

**Hotels, Restaurants, Shops. etc.**—As in previous years inspections were made of premises where foodstuffs are prepared, stored, or sold for consumption. The type of places visited included hotels, restaurants, general foodshops, including dairies, ice-cream and fried-fish shops.

Conditions in regard to cleanliness, storage of food, etc., in the kitchens of hotels and restaurants were satisfactory but, in a few, the standard of general cleanliness left much to be desired, and whilst places have been re-visited with satisfactory results, further supervision will be necessary to maintain the higher standard.

The former practice of placing the kitchens of hotels, etc., below the ground level has been largely departed from and, where possible, they are now placed on top floors where the maximum of light and ventilation is available. A further advantage is that smells of cooking readily escape into the open air at a high level without giving offence. The recent advance in the design of kitchen premises, combined with the use of smooth impervious materials for the finishing of floors and walls together with improved equipment such as the installation of refrigerators, provides more hygienic and cleanly conditions.

The works carried out at the instance of the Department were as follows :—The oil and size painting of kitchens, lobbies, larders, wash-houses, serveries, staircases, and water-closet apartments—33 ; repair of walls—6 ; cleaning and scraping of floors—6 ; fly-proofing of larders—3 ; repairing and renewal of floors—4 ; improvement of ventilation—1 ; substitution of a white enamelled fire-clay sink for an iron sink—1 ; wash-hand basin removed from larder—1 ; refuse bins provided with covers—3 ; miscellaneous matters attended to—3 ; whilst the shops cleaned and painted numbered 34. In all 96 improvements were effected.

Under the Shops Act, 1934, which became effective on 1st January, 1935, further powers are given for the sanitary improvement of shops in respect of ventilation, sanitary conveniences, means of lighting, washing facilities, facilities for the taking of meals, and the maintenance of a reasonable temperature.

**Ice Cream Shops.**—The Department was inundated with applications for the registration of premises for the sale of ice-cream and of persons for carrying on the business of manufacturer or vendor of, or dealer in ice cream, as required in terms of the provisions of the Edinburgh Corporation Order, 1933. Inspection of the premises was carried out in every case and many improvements were insisted upon before registration. These improvements consisted of the provision of proper ice-boxes and ventilated cabinets for the storage of milk or custard, the renewal of freezers, the redecoration or painting of the premises, the lime-washing of cellars, the provision of proper storage for coal, necessary repairs, and improvements in the standard of cleanliness. In addition, ice-cream barrows, vehicles, etc., were inspected whilst patrolling within the City during the summer. Of these 20 per cent. were without washing equipment, 4 per cent. of the vendors lacked clean overalls, and 4 per cent. of the barrows required painting. These matters were duly attended to.

In all 493 premises and 448 persons were registered.

Forty-five samples of ice cream were purchased in the City with a view to ascertaining the quantity of milk fat present. Twenty-nine of these were procured at shop premises and sixteen from persons selling from barrows, etc., in the streets.

The average amount of milk fat in the samples taken from the shops was 3·37 per cent. and in those taken from barrows, etc., 3·26 per cent. An examination of the analyses of the individual samples showed very considerable variations in milk fat, e.g., five of the samples contained less than 2 per cent. and 10 of them less than 3 per cent., while the lowest amount was 1·50 per cent. and the highest was 7·28 per cent. The quantities of milk fat are so divergent that attention is naturally directed to the necessity for a standard being prescribed or the adoption of a classification for different grades of ice cream.



## MILK SUPPLY.

The number of registered dairy-keepers, including hawkers, at 1st January, 1934 was 574. Applications for registration were received during the year in respect of 19 premises and one hawker. Seven of the premises were fully registered, 12 were registered for the sale of bottled milk only, and the hawker was provisionally registered for the sale of bottled milk from a vehicle. In addition, applications for registration from 55 dealers to sell sterilized milk in sealed bottles were provisionally granted. Certificates of registration were cancelled for 6 dairies, one hawker, and for 5 dealers selling sterilized milk in sealed bottles, the sale of milk having been discontinued. The total number of persons registered at the end of the year was 637.

The total approximate daily sale of milk of all classes was 27,866 gallons—an increase of 2,460 gallons over last year's total. Of the total, 21,519 gallons or 77 per cent. was sold in bottles, which is an increase of approximately 7 per cent. over last year. Milk sold over the counter or passed to the consumer other than in bottles accounted for 6 per cent., and the remaining 17 per cent. was supplied in bulk to institutions, etc.

**The Milk (Special Designations) Order (Scotland), 1930.**—At the close of the year, when the National Scheme instituted by the Scottish Milk Marketing Board came into operation for the supply of milk to school children, no less than 89 schools comprising over 31,000 pupils or fully 50 per cent. of the total school population were receiving "Grade A" (Tuberculin Tested) milk under the scheme. This is equivalent to approximately 258,000 gallons for the whole session.

The quantities of the specially designated milks now sold daily within the City are:—355 gallons of "Certified," 2,811 gallons of "Grade A" (Tuberculin Tested) and 81 gallons of "Grade A." In addition, 16,543 gallons of milk are "Pasteurised," although only a small proportion of this is sold under licence, making a total of 19,790 gallons or about 71 per cent. of the total daily sale of milk. This is an increase of 3 per cent. compared with last year.

The Local Authority has granted 240 licences to dealers for the sale of the various grades of milk under the Milk (Special Designations) Order (Scotland), 1930, 87 being for "Certified," 65 for "Grade A" (Tuberculin Tested), 12 for "Grade A," and 76 for "Pasteurised." This is an increase of 17 over the previous year.

## PREVENTION OF FOOD ADULTERATION.

The number of samples submitted for chemical analysis was 1,991, which is at the rate of 4.35 per 1000 of the population. They comprised 897 statutory samples and 1,094 informal samples, the former representing a variety of 86 articles of food and drugs. In regard to the statutory samples, Dr. A. Scott Dodd, B.Sc., Ph.D., F.R.S.E., the City Analyst, reported 853 or 95 per cent. to be genuine and 44 or 5 per cent. as not being in accordance with legal requirements.



**Milk.**—Following the precedent of former years the number of samples of milk is larger than that of any other article of food, showing a total of 259 statutory samples. In addition, 208 samples of milk were procured in course of delivery for biological examination.

In regard to the 259 statutory samples, the City Analyst reported 240 as genuine and 19 as being adulterated, either by the abstraction of fat or the addition of water, or both. The average amount of milk fat, inclusive of adulterated samples, was 3·57 per cent. compared with the present presumptive standard of 3 per cent.

Whilst it has been very exceptional, in recent years, to meet with serious forms of milk adulteration, there is one instance this year that is worthy of mention. This sample was taken while the milk was in course of delivery in the City by motor lorry from a farmer in the County of Midlothian. The consignment consisted of 25 gallons and the Analyst certified it as being deficient in fat to the extent of at least 3 per cent. and containing at least 21 per cent. of added water. The explanation offered by the producer was that he had been feeding his cows on straw, hay and potatoes and that the large percentage of added water might be accounted for by his absence on several occasions during the milking operations. As this excuse could not be regarded as satisfactory, it was decided to prosecute and a fine of £7 was imposed.

**The Milk (Special Designations) Order (Scotland) 1930.**—The various supplies of milk sold in the City under these designations have been submitted for chemical analysis monthly as in former years. The total number of samples taken was 219, consisting of 101 "Certified," 60 "Grade A" (Tuberculin Tested), 23 "Grade A" and 35 "Pasteurised" milk.

A detailed statement is submitted showing the number of samples taken monthly under the different designations, along with the average amount of butter fat found present.

Date.	" Certified."		" Grade A " (T.T.).		" Grade A."		" Pasteurised."	
	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.
January . .	9	3·95	5	3·85	2	3·61	3	3·54
February . .	9	3·74	5	3·73	2	4·28	3	3·89
March . .	9	3·84	5	4·03	2	3·65	3	3·67
April . .	9	3·81	6	3·51	2	3·96	3	3·49
May . .	9	3·91	5	3·86	2	3·80	3	3·75
June . .	9	4·09	5	3·67	2	3·60	3	3·60
July . .	9	4·06	5	3·96	2	3·72	3	3·63
August . .	6	3·76	4	3·90	1	3·55	2	3·67
September . .	8	4·02	5	4·07	2	3·72	3	3·57
October . .	8	4·14	5	3·89	2	4·08	3	3·60
November . .	8	4·04	5	3·99	2	4·29	3	3·66
December . .	8	3·78	5	3·49	2	4·12	3	3·43
Total . .	101	...	60	...	23	...	35	...
Average . .	...	3·93	...	3·82	...	3·88	...	3·62

An examination of the Analyst's figures is of interest as it discloses the fact that the average amount of butter fat, in all grades, was in excess of the requisite standard in each month of the year with the exception of the "Grade A" (Tuberculin Tested) milk which was 3·49 per cent. in December, a deficiency which is practically negligible, while the principal grade, viz. :—"Certified" exceeded 4 per cent. during five months of the year.

**Mince.**—During the year a number of butchers continued to ignore the provisions of the Preservatives Regulations in regard to Mince, and I regret to report that there have been more contraventions than in any year since the inception of these Regulations. Another disquieting feature was the inordinate quantity of preservative in several of the samples. Three of them contained Sulphur Dioxide equal to 1,000, 1,100 and 1,670 parts per million by weight respectively, compared with the maximum amount of 450 parts permissible only during the months of June, July, August and September. The number of samples submitted for analysis was 59 and 23 of these did not conform to the Regulations. Legal action was instituted against 17 offenders, each of whom pled guilty and fines amounting to £71 were inflicted.

**Sausages.**—It is most satisfactory to report that the attitude of the butchers towards the observance of the Preservatives Regulations in regard to sausages is in marked contrast to that adopted by them towards mince. Despite the fact that more samples were analysed with a view to the detection of preservatives than any other foodstuff, there have been no infringements during the year. A total number of 91 samples of various descriptions of sausages was purchased for chemical examination and the City Analyst reported that in each instance, not only was the amount of preservative found present within the limits sanctioned by the Regulations, but that 14 of the samples were free from any preservative.

**Imported Foodstuffs.**—Regular inspection was made at Leith Docks of the imported articles of food which are required to be examined by the Local Authority under the Preservatives Regulations. Altogether 22 samples were procured for the purpose of analysis and consisted chiefly of canned meats consigned from America and Denmark. The City Analyst reported that all the samples conformed to the Regulations.

## THE SALE OF FOOD ORDER, 1921.

The only section of this Order which remained in force under the Expiring Laws Continuance Act, during the year, was that relating to the marking of Imported Meat. This has now been embodied in an Order made under the Merchandise Marks Act, viz. (Imported Goods) No. 7 Order, 1934.

Regular inspection of the butchers' premises in the City revealed the fact that the provisions of the Order were being generally complied with and where contraventions occurred, these were not of a serious nature but appeared to be due more to carelessness than to an attempt to evade its terms. In such instances a warning was given to the offender and his premises were kept under observation. This procedure was invariably found to be effective and obviated the necessity of legal proceedings.

## THE RAG FLOCK ACT, 1911.

There is a marked improvement, as regards cleanliness, in the samples of rag flock taken this year. Nine samples were procured from bedding manufacturers in the City and forwarded for chemical analysis. The reports received from the City Analyst showed that the standard of cleanliness in every instance was well within the limit prescribed under the Act. In four of the samples the amounts of chlorine found were 5, 6, 7 and 8 parts respectively per 100,000 parts of flock, compared with the maximum of 30 parts of chlorine allowed under the Regulations. While these results are highly satisfactory, attention is directed again to the limited scope of this Act, which excludes various materials used for similar purposes. What have been termed "the salvage of absolutely new materials," e.g., Cotton Flock, Mill Puff, etc., have been found to give results in regard to cleanliness considerably worse than any sample of rag flock taken in the City and these should certainly be brought under regulation.

## THE POISONS AND PHARMACY ACT, 1908.

The sections of this Act administered by Local Authorities were to be repealed under the Pharmacy and Poisons Act, 1933, but the appointed day on which this Act is to come into operation has not yet been fixed. The names appearing on the register vary slightly from year to year, and the number of applications received this year for licences to sell poisonous substances used in agriculture and horticulture was 28 compared with 29 in the preceding period. It was found on inspection of the various premises that the terms of the Act were being well observed and, while it was necessary to direct attention to certain discrepancies, these were of a minor nature and immediately remedied.

## THE FERTILISERS AND FEEDING STUFFS ACT, 1926.

For several years it has been a matter for comment that farmers have neglected to avail themselves of the facilities introduced for their special benefit under this Act. The fact that, since the Act came into operation, there has not been a single application to the Local Authority from any purchaser of Fertilisers or Feeding Stuffs to have samples taken for examination by the Agricultural Analyst is significant of the apathetic attitude displayed by the farmers in the district. Visitation was made to various premises throughout the City where Fertilisers and Feeding Stuffs were prepared for sale or consignment, and 8 official samples were taken in the manner prescribed in the Regulations, 7 of these being of Feeding Stuffs and 1 sample of Fertiliser. The results were very satisfactory, as the Agricultural Analyst reported that, not only was each sample in conformity with the statutory statement, but that in several instances the percentages were exceeded in one or more constituents.



## THE MERCHANDISE MARKS ACT, 1926.

The number of imported foodstuffs which comes within the purview of this Act is being increased every year and now represents a considerable variety. It was evident on visiting business premises throughout the City that the majority of the shopkeepers were alive to the observance of the specified Orders, as the infringements were few, and it was found that a reprimand was sufficient to prevent a repetition of the offence without having recourse to legal action. These contraventions to a great extent occurred in regard to the ticketing of imported raw tomatoes and it was somewhat surprising to find that there still existed a certain amount of dubiety in regard to the marking of tomatoes grown in the Channel Islands, several fruit sellers being of the opinion that these could be labelled "Home Grown" whereas they must be ticketed with "the name of the island" or the word "Empire," as defined in the Act.

### PORT SANITARY INSPECTION.

**Shipping Arrivals.**—Vessels which arrived at Leith Docks and Granton Harbour from foreign ports numbered 1,389, representing 1,284,649 tons, whilst vessels which arrived from home ports numbered 9,111, representing 1,657,762 tons. The total number of ships, including steamers, motor, sailing and fishing vessels arriving in the Port Sanitary Area was 10,500, having a total tonnage of 2,942,411, showing a decrease of 386 vessels, but an increase of 116,725 tons compared with last year.

**Sanitation.**—Port Sanitary Control has the threefold task of (1) excluding from the country infectious disease shipborne from abroad; (2) inspecting imported meat and other food stuffs; and (3) inspecting ships with a view to the removal of insanitary conditions prejudicial to health. The latter duty falls to be reported upon by this Department, whilst the former duties are carried out by the Medical and Veterinary staffs respectively.

The boarding, inspection and re-visits of vessels totalled 1,848, and the insanitary conditions dealt with were 3,829, necessitating 17 written and 254 verbal intimations, the service of 51 notices and 566 copies of the Regulations. Of the many insanitary conditions dealt with, the lack of cleanliness in respect of the floors, bunks, bedding, internal partitions and ceilings of the crews' quarters, and the offensive state of the latrines and other sanitary fittings were of most frequent occurrence. The cleanliness of the bilges, drinking water tanks, and the removal of garbage also called for careful supervision. The presence of bed-bugs in the crews' quarters was eradicated by efficient fumigation, and the cockroach invasion of galleys, stores and living quarters was dealt with by similar measures or the use of insecticides. A detailed statement of the insanitary conditions is appended to this report.

The Dock Commissioners continued to maintain a high standard of cleanliness within the Dock area. The roads, wharves, sheds, sanitary conveniences, etc., were regularly and systematically kept clean.



**Rat Destruction.**—Rat plague being the precursor to human plague, stringent measures are required for the destruction of rats if sea-borne plague is to be prevented. Effective measures called for international co-operation to obtain the best results and this has been established by the Sanitary Convention of Paris, 1926, whereby each signatory country undertakes to subject their foreign-going merchant ships to measures of rat destruction every six months. Masters of such vessels have to produce valid certificates from accredited Port Sanitary Authorities in the ports of call of the signatory countries stating the measures undertaken and the results obtained. Under Article 28 of this Convention, the total number of certificates granted to Masters of vessels during the year was 163, of which 129 were exemption certificates. Of these certificates, 9 were issued at Methil, 9 at Burntisland, 3 at Bo'ness, 1 at Rosyth by arrangement with the respective authorities and the remainder at Leith. The fees collected totalled £290 17s.

In 34 cases it was necessary to request fumigation measures to be undertaken. Cyanogen chloride gas was employed for this purpose with satisfactory results. The total number of rats killed on board ships in port, on the quays and in wharves was 1,142. Forty-four of these were submitted to bacteriological examination for plague infection with negative results. In all, 32 vessels arrived from plague ports, and all the necessary precautions were taken in respect of these vessels.

Progressive measures were adopted by the Dock Commissioners in rat-proofing sheds, etc. In carrying out rat-repression work continuous trapping was carried out, whilst not less than 10,000 poison baits were used with good results.

**V.D. Clinics.**—Under the auspices of the British Social Hygiene Council, 566 pamphlets of the Scottish Committee containing a list of treatment centres in Scotland approved by the Department of Health for Scotland under the Public Health (Venereal Disease) Regulations (Scotland) 1916, were distributed on board vessels arriving in the Port Sanitary Area. These leaflets are printed in several languages, offer free treatment by the Local Authority, specify the days and hours of clinics, and thereby meet the special requirements of shipping.

In the execution of the duties of the Port Sanitary Department, much valuable assistance has been received from H.M. Collector of Customs, the Leith Dock Commissioners, the Granton Harbour Official, and the various shipping companies and agents to whom this opportunity is taken of expressing my thanks and appreciation of their esteemed co-operation.

*Port Sanitary Inspection—Annual Statement.*  
*Year 1934.*

Ships boarded and inspected . . . . .	1,242
Re-visits made . . . . .	606
Nuisances discovered . . . . .	3,829
Communications written . . . . .	17
Notices served . . . . .	51
Verbal warnings . . . . .	254
Ships fumigated or otherwise treated for vermin by owners . . . . .	137
Fumigation certificates granted . . . . .	53
International fumigation certificates granted . . . . .	34
International Exemption Certificates granted . . . . .	129
Local fumigation certificates granted . . . . .	19
Rats exterminated . . . . .	1,142
Ships provided with rat guards . . . . .	601
Notices of regulations served upon Masters or Officers in charge . . . . .	566
V.D. Pamphlets distributed on behalf of the B.S.H. Council . . . . .	566
Rats submitted for bacteriological examination and Reported Negative . . . . .	44
Nuisances abated . . . . .	3,755

*Nuisances Discovered.*

Dirty floors, tables, decks, etc. . . . .	522
Dirty bunks and bedding . . . . .	1,298
Dirty partitions and ceilings . . . . .	328
Dirty lockers . . . . .	467
Foul closets and latrines . . . . .	119
Foul wash basins . . . . .	45
Foul sinks . . . . .	19
Foul baths . . . . .	2
Choked scuppers . . . . .	47
Choked and defective latrines . . . . .	46
Choked and defective wash basins . . . . .	7
Choked and defective sinks and baths . . . . .	6
Accumulations of garbage, refuse, etc. . . . .	124
Dirty fresh water tanks . . . . .	56
Dirty and offensive bilges . . . . .	226
Dirty galleys, food stores, pantries, etc. . . . .	94
Dirty wash places . . . . .	51
Dampness in quarters . . . . .	2
Ships without rat guards . . . . .	74
Presence of rats and mice . . . . .	110
Presence of cockroaches and beetles . . . . .	48
Presence of bugs and fleas . . . . .	82
Presence of flies . . . . .	7
Miscellaneous . . . . .	49
Total . . . . .	<u>3,829</u>

*Rat Destruction Measures in Dock Area.*

Baits laid . . . . .	10,000
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**STAFF.**

I desire to express my cordial appreciation of the enthusiastic services rendered by all the members of the staff.

I am,

My Lord Provost, Ladies and Gentlemen,

Your obedient Servant,

ALLAN W. RITCHIE, F.R.San.I., F.R.S.E.,  
*Chief Sanitary Inspector.*

# NUISANCES AND SANITARY IMPROVEMENTS IN 1934.

NATURE OF NUISANCE.	Calton.	Canongate.	Newington	Morningside.	Merchiston.	Gorgie.	Haymarket	St. Bernard's.	Broughton.	St. Stephen's.	St. Andrew's.	St. Giles.	Dalry.	George Square.	St. Leonard's.	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Colinton.	Corstorphine and Craigmond.	TOTALS.
<i>Water-closets :—</i>																								
Water-closets introduced . . . . .	1	...	5	4	...	8	4	3	3	5	...	2	2	...	8	6	...	...	2	5	6	7	...	26
New apparatus substituted . . . . .	3	...	...	...	...	...	3	3	...	...	...	...	2	...	1	15	...	...	3	...	1	...	...	87
Improved or repaired . . . . .	17	16	2	7	...	7	9	9	4	7	11	18	5	13	12	32	5	17	2	8	19	2	2	219
Partitions of W.C. apartments repaired . . . . .	...	...	...	...	...	...	...	1	...	...	...	...	1	3	3	3	3	4	...	4	...	...	...	24
Water-closets and sinks in a filthy condition and cleansed . . . . .	4	29	...	...	...	3	2	1	21	...	...	...	2	17	31	52	2	5	...	5	8	...	...	185
Choked water-closets cleared . . . . .	1	8	...	...	...	1	6	2	11	4	6	5	1	4	17	29	2	4	...	...	4	...	...	106
Water-closet apartments insufficiently lighted and ventilated—improvements effected . . . . .	...	...	...	...	...	1	1	1	...	1	1	...	...	...	...	1	1	...	...	...	...	1	1	6
New water-closet apartments provided . . . . .	...	...	...	...	...	1	3	1	...	...	...	...	...	...	...	1	2	...	...	2	5	7	13	36
<i>Sinks, Tubs, and Wash-hand Basins :—</i>																								
Sinks introduced . . . . .	...	...	1	...	...	3	1	3	...	...	1	...	...	6	2	12	1	...	2	...	1	20	...	30
Insanitary sinks abolished . . . . .	...	...	...	...	...	4	1	4	3	6	2	5	11	10	13	15	10	2	3	...	8	5	...	71
Earthenware sinks and tubs substituted . . . . .	2	1	7	7	...	4	...	4	...	...	...	...	...	15	17	32	2	10	3	16	...	...	...	124
Repairs (woodwork, etc.) . . . . .	8	26	5	6	...	9	6	4	3	17	6	5	15	6	12	26	1	1	1	28	...	1	...	233
Choked sinks, wash-tubs, etc., cleared . . . . .	...	4	2	1	...	1	...	2	3	4	4	5	...	...	...	...	3	3	...	...	9	...	...	85
Wash-hand basins renewed or introduced . . . . .	...	2	2	...	...	...	...	...	1	1	...	1	...	...	...	...	3	...	...	...	...	...	...	12
<i>Drains :—</i>																								
Choked drains cleared . . . . .	33	13	2	3	8	61	14	9	20	25	14	19	17	39	44	39	23	29	11	17	12	3	3	458
Choked surface traps cleared . . . . .	6	6	...	3	1	13	1	2	1	5	1	6	...	3	8	14	13	6	3	2	6	2	2	102
Drains repaired or renewed . . . . .	4	1	...	2	...	1	3	1	2	1	3	...	2	2	4	9	5	2	...	3	...	...	...	51
Soil pipes repaired or renewed . . . . .	5	4	...	1	...	...	...	...	1	3	1	...	1	1	3	9	4	1	3	5	3	1	1	50
Sinks, etc., waste pipes repaired or renewed . . . . .	8	3	1	5	...	4	4	...	3	3	4	4	8	1	4	8	6	7	...	6	6	...	...	89
Rain-water conductors repaired or renewed . . . . .	1	4	1	2	2	1	...	2	...	...	1	3	1	2	5	10	1	2	...	2	6	5	...	51
CARRY FORWARD . . . . .	92	126	17	36	44	117	59	40	77	87	60	79	67	123	190	312	89	96	32	115	102	62	23	2,045

# NUISANCES AND SANITARY IMPROVEMENTS IN 1934—continued.

NATURE OF NUISANCE.	Calton.	Canongate.	Newington.	Morningside.	Merchiston.	Gorgie.	Haymarket	St. Bernard's.	Broughton.	St. Stephen's.	St. Andrew's.	St. Giles.	Dalry.	George Square.	St. Leonard's	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Colinton.	Corstorphine and Craigmond.	TOTALS.
BROUGHT FORWARD . . . . .	92	126	17	36	44	117	59	40	77	87	60	79	67	123	190	312	89	96	32	115	102	62	23	2,045
<i>Water Supply.</i> —																								
Cisterns found dirty . . . . .	2	5	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	2	1	1	4	...	...	17
Cisterns found without covers . . . . .	1	...	...	...	...	...	...	1	...	1	...	...	...	3	...	...	...	10	...	...	...	...	...	5
Cisterns repaired or renewed . . . . .	14	2	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	7	...	...	...	...	...	47
Branches taken off the main . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2	1	...	...	...	...	...	4
Water pipes repaired . . . . .	3	1	...	1	...	...	1	...	1	2	1	4	...	...	...	10	2	7	1	...	...	...	...	39
Houses temporarily without water supply due to burst pipes, etc. . . . .	...	10	...	...	...	...	6	...	...	...	...	...	...	1	...	33	...	...	...	1	1	...	...	52
<i>Repairs to Houses.</i> —																								
Floors, hearths, doors, etc., repaired . . . . .	8	6	4	5	3	3	4	1	18	4	8	4	5	8	10	21	16	19	1	13	5	1	1	168
Partition walls repaired . . . . .	3	4	1	...	...	...	3	2	...	3	1	8	...	4	2	4	4	1	...	3	...	...	...	43
Windows and skylights repaired or renewed . . . . .	10	2	...	...	9	1	5	2	4	5	23	7	...	7	5	13	6	16	...	15	4	1	1	141
Coal bunkers repaired or provided . . . . .	...	2	...	...	...	...	...	1	...	2	...	2	...	...	1	19	...	3	...	3	...	...	...	30
Grates or ranges repaired or substituted . . . . .	8	4	2	7	2	2	...	...	3	2	9	10	3	2	13	10	5	2	1	5	2	2	...	92
Wall and ceiling plaster repaired . . . . .	26	27	2	2	2	3	2	3	20	9	21	3	4	9	8	13	30	30	2	20	2	2	...	247
Defective roofs repaired . . . . .	4	1	2	...	1	...	1	2	4	1	...	2	1	2	5	10	2	5	4	4	2	...	5	57
Boiler of kitchen range renewed . . . . .	1	2	...	...	...	...	...	1	1	...	...	...	1	...	...	2	2	...	1	1	...	...	...	12
<i>Nuisances in Houses.</i> —																								
Floors and bedding of houses in a dirty condition and cleansed by tenants . . . . .	2	17	5	4	6	9	6	1	...	2	1	1	1	17	23	47	4	6	...	3	20	...	...	175
Nuisances due to bad smells in dwelling houses caused by escape of gas dead vermin, etc. . . . .	7	21	5	5	2	1	10	4	2	17	7	2	6	4	3	11	5	6	2	2	4	1	3	130
Damp houses remedied or abated . . . . .	21	5	1	5	3	3	2	8	1	2	14	13	6	9	6	13	6	7	5	4	1	1	...	136
Houses overcrowded . . . . .	2	10	1	4	...	1	4	2	4	1	1	1	...	6	3	1	...	4	3	...	...	...	...	60
Houses and shops flooded from defects on flats above . . . . .	102	147	33	3	9	72	25	34	39	61	106	171	143	94	162	53	114	201	59	134	30	13	4	1,809
CARRY FORWARD . . . . .	310	396	79	75	85	212	135	104	177	206	262	316	241	292	434	576	306	421	116	338	178	83	30	5,381



# NUISANCES AND SANITARY IMPROVEMENTS IN 1934—continued.

NATURE OF NUISANCE.	Calton.	Canongate.	Newington.	Morningside.	Merchiston.	Gorgie.	Haymarket.	St. Bernard's.	Broughton.	St. Stephen's.	St. Andrew's.	St. Giles.	Dalry.	George Square.	St. Leonard's.	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Colinton.	Corstorphine and Cramond.	TOTALS.
BROUGHT FORWARD . . . . .	310	396	79	75	85	212	135	104	177	206	262	316	241	292	434	576	306	421	116	338	178	83	39	5,381
<i>Nuisances in Houses (continued) :—</i>																								
Animals kept in, or in close proximity to dwellings	...	5	...	2	2	...	...	...	...	...	1	1	...	2	...	2	1	2	2	...	2	...	9	31
Houses distempered, papered or painted by—																								
Tenants . . . . .	6	19	10	6	3	4	2	...	5	2	5	1	4	1	...	33	19	15	1	20	6	2	2	166
Owners . . . . .	14	24	2	11	6	...	...	5	19	2	7	11	9	7	3	5	17	13	1	14	...	...	...	170
<i>Stairs, Passages, etc. :—</i>																								
Staircases painted . . . . .	85	120	20	35	42	133	36	23	87	34	30	108	70	39	33	51	77	87	25	107	4	...	1	1,247
Stairs and passages in a dirty condition and cleansed by tenants . . . . .	387	89	58	58	39	88	32	151	489	39	84	97	42	98	101	82	90	37	20	16	27	2	9	2,135
Dogs and cats committing nuisance in common stairs and back greens . . . . .	20	4	3	7	5	8	15	7	13	7	12	2	5	11	14	20	7	2	3	5	2	2	...	174
<i>General :—</i>																								
Premises infested by rats . . . . .	13	31	14	24	6	23	24	12	10	20	23	28	7	12	13	30	19	14	17	9	6	12	13	380
Premises infested by other vermin . . . . .	31	30	7	4	3	37	5	4	14	12	21	45	26	24	36	11	17	18	5	35	31	5	5	426
Accumulations of rubbish, garbage and filth removed from areas, roofs, cellars and vacant houses . . . . .	121	63	38	37	22	22	34	28	160	51	38	45	45	108	44	43	409	764	51	331	6	2	3	2,465
Accumulations of manure near dwellings . . . . .	1	3	1	5	3	2	10	2	26	2	...	...	3	1	3	11	2	...	...	...	2	1	1	79
Disused cellars cleaned and closed . . . . .	3	4	...	1	1	1	2	1	...	...	...	...	...	2	4	...	5	6	...	...	...	...	...	36
Tenants casting garbage over windows . . . . .	26	12	11	18	9	11	5	5	40	15	2	7	9	23	27	39	10	4	5	9	...	...	...	291
Surfacing of courts repaired or renewed . . . . .	12	...	...	...	...	...	...	...	15	...	3	...	6	...	...	...	...	...	...	...	...	...	...	36
Noise nuisances . . . . .	...	...	...	...	1	...	1	...	1	7	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Shops cleaned by tenants or owners . . . . .	...	6	...	5	1	...	6	...	...	...	...	1	...	...	...	5	4	4	...	1	1	...	...	34
Seasonal workers' huts found dirty and cleansed . . . . .	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	14
Miscellaneous nuisances . . . . .	112	19	15	13	22	48	24	42	78	72	49	41	27	26	28	116	26	25	11	19	23	11	22	869
TOTALS . . . . .	1141	825	258	301	249	589	332	384	1134	469	540	707	494	646	740	1025	1009	1412	257	904	289	123	116	13,944

## SUMMARY.

Complaints by citizens . . . . .	3,744
„ „ other Departments . . . . .	118
Nuisances discovered and reported by District Inspectors . . . . .	10,082
Total nuisances dealt with by the Department . . . . .	<u>13,944</u>
Intimations of existence of nuisance served . . . . .	1,939
Notices to remove nuisances served at the instance of the Local Authority . . . . .	38
Notices delivered cautioning persons against casting garbage over windows . . . . .	2,233
Notices served on occupiers failing to take due rotation of stair sweeping and washing . . . . .	577
Notices served for the cleaning of dirty areas, cellars, etc. . . . .	378
Notices and letters served for the white-washing and cleansing of houses . . . . .	84
Notices and letters served for the removal of accumulation of manure . . . . .	29
Notices served in connection with defective drains . . . . .	113
Intimations under Section 109 of the Housing (Scotland) Act, 1925 . . . . .	1,036
Letters sent to tenants and owners of shops with regard to cleansing and sanitary provisions . . . . .	5
Notices served in connection with the painting of common staircases . . . . .	4,766
Notices served in connection with the cleansing of water cisterns . . . . .	254
	<u>11,452</u>

VETERINARY DEPARTMENT,

PUBLIC HEALTH CHAMBERS,

JOHNSTON TERRACE,

EDINBURGH, 1, 15th April, 1935.

To

*The Lord Provost, Magistrates, and**Council of the City of Edinburgh.*

MY LORD, LADIES AND GENTLEMEN.

I beg to submit, for transmission to the Department of Health for Scotland, my Report for the year ending 31st December, 1934, which has been called for by the Department in virtue of their powers under Section 4 (5) of the Milk and Dairies (Scotland) Act, 1914.

I am,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,

*Chief Veterinary Inspector.*

To

*The Secretary,**Department of Health for Scotland,**Edinburgh.*

SIR,

I beg to submit herewith my Report for the year 1934, as required by Section 4 (5) of the Milk and Dairies (Scotland) Act, 1914. An account of the year's work in connection with the inspection of meat and other foodstuffs, including port food inspection, is added.

### MILK AND DAIRIES (SCOTLAND) ACT, 1914.

No administrative difficulties have been encountered during the year in the operation of the Act, and no points have arisen which merit special attention.

**Inspection of Cows and Dairy Byres.**—In terms of the Act, the Veterinary Inspector is required to inspect the cattle in all registered dairies in the City from time to time and once at least in each year. In accordance with practice, the cattle in all the registered dairies in the City have been examined at intervals of one month. During

the year 739 visits were made to registered dairies and the cattle therein inspected. In determining the duties of the Veterinary Inspector, under the Act, the Local Authority made provision for the periodical inspection of all dairy cattle in premises which were exempt from registration under the Act. In accordance with this requirement, 74 visits were made to non-registered dairies.

The newly-calved cows offered for sale in the market at Gorgie on the Tuesday and Wednesday of each week were subjected to inspection and examination in the market identical to that which takes place in registered dairy premises. During the year, 1,496 cows were so examined in the market, representing an average of 29 cows exposed for sale each week. Three cows were ordered out of the Market Byres, one on account of tuberculous emaciation and the other two on account of lameness. All three animals were slaughtered at the owner's risk.

**Health of Cows, etc.**—Apart from tuberculosis, 131 diseased cows were detected in the course of inspections of cattle in registered or exempt premises. The diseases encountered were as follows :—

Mastitis . . . . .	48
Suppurating conditions of udders and teats . . . . .	14
Johne's Disease . . . . .	1
Retained Placenta . . . . .	7
Psoroptic Mange and Ringworm . . . . .	30
Tumours . . . . .	2
Injuries and General Disorders . . . . .	29
	<hr/>
	131
	<hr/>

The cows in question were removed permanently or temporarily from the milking herds as cases required. The milk was withdrawn from sale in all cases in which risk was entailed of contamination or infection from the diseased condition. In appropriate cases it was fed to pigs or calves after boiling, otherwise it was destroyed.

**Tuberculosis in Dairy Cows.**—During the year 12 cows, on registered dairy premises in the City, which were found to be tuberculous, within the meaning of the Tuberculosis Order of 1925, were dealt with in terms of that Order. These animals were classified as follows :—Tuberculosis of the udder 5, chronic cough and showing definite clinical symptoms of tuberculosis 7.

The tuberculin test was not applied in any case under the powers contained in Section 22 of the Act. So far as the test was employed for the diagnosis of tuberculosis it was used under the powers contained in the Tuberculosis Order.

The incidence of tuberculosis in dairy cows in the City and district revealed by post-mortem statistics at the Abattoirs during 1934 shows a higher occurrence than has been the average over a period of years. Of a total of 3,452 cows slaughtered, 1,876 or 54·35 per cent. were affected with tuberculosis in some degree. This compares with



an average of 43·33 per cent. over the previous five years. In 8·90 per cent. of cases, the disease was advanced and the whole of the carcase and all the viscera were condemned. In 16·84 per cent. tuberculosis affected the viscera and localised areas on the carcase, and in 74·26 per cent., it was confined to one or more of the visceral organs. The economic side of tuberculosis is illustrated by the figures quoted in relation to meat inspection, where it is shown that tuberculosis was responsible for 85·8 per cent. (by weight) of seizures of cow beef from all causes, and 82·0 per cent. (by weight) of seizures of all classes of beef during 1934.

**Number of Cowsheds.**—At December, 1934, there were on the register 70 premises in the occupation of milk producers. The number of cowsheds on these premises was 116 and the average number of cows accommodated therein was 1,939.

Two certificates of registration were transferred to new tenants, two new certificates were granted during the year, and six were cancelled. The number of dairy premises in the occupation of milk producers in the City was thus reduced by four.

At December, 1934, the number of exempted premises was 25, and the number of cows therein 75. These premises are all licensed under the Cattle-sheds in Burghs (Scotland) Act, 1866. In only a few cases is milk sold from these premises. Exemption from registration under the Milk and Dairies (Scotland) Act, continued to be granted in those cases in which the amount of milk sold per day did not exceed two gallons.

**Milk and Dairies Order, 1934.**—Articles 4 to 14 of the Milk and Dairies Order 1934, have been complied with so far as these articles apply to the premises of milk producers in the City.

**Milk and Dairies (Scotland) Act, 1914 (Sections 13, 14 and 21).**—The City dairymen continue to observe the terms of Sections 13 and 14 of the Act with regard to the withdrawal from sale of the milk from a diseased cow and notification of the existence of disease.

The City being entirely a receiving and consuming district no question of taking samples of milk under Section 21 of the Act has arisen.

**Milk (Special Designations) Order (Scotland), 1930.**—The two producers' licences for the sale of designated milk under this Order have been continued, namely, one "Grade A" and one "Certified." The licence for the production and sale of certified milk is held by the Royal Victoria Hospital Tuberculosis Trust, Gracemount Farm, Liberton. The average number of cows in the herd is 36, and the production is approximately 24,000 gallons, all of which is retailed in the City by the producers. The tuberculin test was applied twice during the year to the dairy herd and to the young stock belonging to the Trust. There were no reactors.

All milks sold in the City under licences granted in terms of the Milk (Special Designations) Order, have been periodically sampled and subjected to bacteriological examination. During the year, 167 samples of graded milk were thus examined. Of these, 37 were samples of pasteurised milk and were representative of milk from both licensed and non-licensed pasteurisers.

**Milk Supply—City Hospitals.**—The dairy herd at Colinton Mains Farm belonging to the Corporation, has continued the supply of milk to certain of the Hospitals. The herd was subjected to the subcutaneous tuberculin test twice during the year and tubercle-free condition has been maintained. The milk was repeatedly sampled during the year for bacteriological examination and conformed to the bacterial standard for certified milk.

The average number of cows in milk during the year was 80, and the total output of milk for the year was approximately 73,700 gallons.

**Milk Supply—Bangour.**—Further progress has been made during the year in building up the dairy herd. Home reared young stock will be ready to be added to the herd early in 1935, and it is anticipated that, by the summer of 1935, all the milk required for the hospital will be produced on the farm. The tuberculin test was applied to the whole of the stock in the month of April and again in October. There were no reactors.

The carcasses of all animals slaughtered for food in the Abattoir on Bangour Farm have been inspected before issue to the Steward of the Institution. The number of carcasses inspected during the year was, Cattle 2, Sheep 86 and Pigs 96.

The Department has continued to provide the clinical services required in connection with the stocks at Colinton Mains, Bangour and Roddinglaw Farms.

### Bacteriological Laboratory.

The following summary of work performed in the Laboratory during the year has been furnished by Mr W. Jowett, F.R.C.V.S., D.V.H.

**(1) Enumeration of Bacteria in Milk.**—During the year 175 samples of milk as shown below were subjected to bacteriological examination for the purpose of ascertaining their respective hygienic standards.

Certified Milk . . . . .	64
Grade "A" (Tuberculin Tested) Milk . . . . .	45
Grade "A" Milk . . . . .	21
Pasteurised Milk . . . . .	37
Sterilised Milk . . . . .	2
Milk for City Hospitals . . . . .	6
	<hr/>
	175
	<hr/>

Eleven samples of Certified and twelve of Grade "A" milk fell below the standard specified in the Milk (Special Designations) Order. The faults were referred to the producers and the Local Authorities concerned with satisfactory results as shown by subsequent test samples.

Seven samples of pasteurised milk failed to conform to the bacterial standard specified in the Milk (Special Designations) Order, and the action necessary to remedy the defects was taken.

The coliform test, though not required by the Milk (Special Designations) Order, was applied to all samples of pasteurised milk and showed the presence of coliform organisms in 1/10th c.c. in 16 samples, equivalent to 43·2 per cent. of those examined.

(2) **Milk from Individual Cows in City Byres.**—One hundred and sixteen samples were examined for the presence of the tubercle bacillus and other forms of infection. The tubercle bacillus was demonstrated in 4 samples by microscopical examination and in 1 by means of the biological test. Of the remaining samples, it was found that various types of infection (streptococci, staphylococci, and *C. pyogenes*, etc.) were present in 50.

(3) **Bulk Milk Samples** subjected to biological test for tuberculosis :—

(Brought forward incomplete at the end of 1933) :—

	25			
Tested and completed at 31st December, 1934	233	Positive	14	Inconclusive 7
Total . . .	258			

Remaining under test at 31st December, 1934	34
Total . . .	292

The inconclusive results are attributable to the death of the experimental animals from intercurrent infection before completion of the test. Excluding inconclusive results, the samples tested and completed showed 5·42 per cent., to be infected with living tubercle bacilli.

The 14 positive results were referred to the local authorities concerned and infection was traced in seven cases, involving the slaughter under the Tuberculosis Order of six cows affected with tuberculosis of the udder. In the remaining seven cases, the source of infection had apparently been removed before the conclusion of the biological test, the negative clinical findings being confirmed by the biological test of check bulk samples from the herds concerned. Similar check samples from herds in which tuberculous animals were found showed that the milk had ceased to be infected after removal of the animals concerned.

(4) **Biological Test of Graded Milks for Tuberculosis.**—Ten samples of Grade "A" (Tuberculin Tested), Grade "A" and Pasteurised milk were tested. One Grade "A" sample proved positive and was referred to the Local Authority concerned, the cow responsible for infection being traced and slaughtered. All the Grade "A" (Tuberculin Tested) samples were negative.

**(5) Examination of Miscellaneous Materials—**

Material.	Number Examined	Result of Examination.
Blood (Bovine) . . . . .	204	<i>Anthrax</i> — Positive . . . . . 1
Blood (Bovine) . . . . .	39	<i>B. Abortus infection</i> — Positive . . . . . 5 Doubtful . . . . . 1
Blood (Avian) . . . . .	401	<i>Bacillary White Diarrhea</i> — Positive . . . . . 24 Doubtful . . . . . 27
Skin scrapings . . . . .	6	<i>Monge (Scheduled Forms)</i> — Positive . . . . . 0
		<i>Ringworm</i> Positive . . . . . 2
Expectorate (Cow's) . . . . .	4	<i>Tuberculosis</i> — Positive . . . . . 3
Diseased organs and materials . . . . .	44	Tuberculosis . . . . . 24 B. Abortus infection . . . . . 3 C. Pyogenes infection . . . . . 2 Other Pyogenic infections . . . . . 4 Actinobacillosis . . . . . 1 Neoplasms . . . . . 2 Colibacillosis . . . . . 6 Parasitic lesions . . . . . 2
Milk . . . . .	29	re Fitness for use after mastitis . . . . . 16 re Complaints . . . . . 9 re Presence of Acetone . . . . . 2 re Presence of Blood . . . . . 2 re Sterility . . . . . 8
Milk Bottles . . . . .	8	
Food materials . . . . .	10	Adulterated or contaminated . . . . . 10
	<u>745</u>	

**(6) Preparation of Vaccines.**—As in previous years, vaccines were prepared for the treatment or prevention of mastitis and certain other diseases in the farm stock.

**INSPECTION OF MEAT AND OTHER FOODS.**

**(a) Fat Stock Markets.**—The usual observation has been maintained in the fat stock markets throughout the year, a Veterinary Officer being detailed for duty in the markets on each market day. Twenty-seven cattle, 2 sheep and 5 pigs were ordered out of the markets by the Veterinary Officer, on account of disease or injury. In all cases the animals were removed to the slaughterhouse and slaughtered at the owners' risk.

The following table shows the number of animals exposed for sale in the fat stock markets during 1934 :—

Cattle . . . . .	48,725
Calves . . . . .	6,025
Sheep . . . . .	289,307
Swine . . . . .	19,453
	<u>363,510</u>

**(b) Abattoirs.**—Supervision has been maintained in accordance with the usual practice at Gorgie and Leith Abattoirs.



The number of animals passing through the slaughterhouses during 1934 is shown in the following table :—

		Gorgie.	Leith.	Total.
Cattle	Oxen . . . . .	27,761	1,112	28,873
	Bulls . . . . .	501	38	539
	Cows . . . . .	3,199	253	3,452
	Heifers . . . . .	1,014	...	1,014
		<u>32,475</u>	<u>1,403</u>	<u>33,878</u>
Calves . . . . .		4,119	16	4,135
Sheep . . . . .		151,344	4,868	156,212
Swine . . . . .		17,593	762	18,355
		<u>205,531</u>	<u>7,049</u>	<u>212,580</u>

The gross total of animals slaughtered is lower by 8,901 than in 1933. The number of sheep fell by 11,929, but there were increases in all the other classes of animals.

The abattoir at Leith was closed in the month of May under powers contained in the Edinburgh Corporation Order Confirmation Act, 1933. The whole of the work of slaughtering animals for human food in the City is now concentrated at Gorgie Abattoir.

(c) **Carcases and Offal condemned in Abattoirs.**—Carcases partially or wholly condemned in the City abattoirs weighed 154·01 tons. To this there falls to be added 105·22 tons (weight estimated) of condemned offal, making a total of approximately 259·23 tons. Tuberculosis was responsible for 40·43 per cent. of the number of carcase seizures and for 43·60 per cent. of the number of offal seizures. Comparison between the weight of meat seized on account of tuberculosis and of non-tuberculous disease, shows that tuberculosis was responsible for 82·0 per cent. of all beef seized and destroyed, for 45·6 per cent. of veal and 47·5 per cent. of pork. Details of the seizures are shown in the following tables :—

Number and weight of carcasses in the different classes of animals condemned at Abattoirs during 1934 :—

	Totally Condemned.		Partially Condemned.		Total Weight in Lbs.
	Number.	Weight in lbs.	Number.	Weight in lbs.	
Oxen . . . . .	98	55,066	329	49,430	104,496
Bulls . . . . .	10	7,225	31	5,555	12,780
Cows . . . . .	210	111,015	343	53,944	164,959
Heifers . . . . .	19	8,299	18	1,304	9,603
Calves . . . . .	45	2,472	25	933	3,405
Sheep . . . . .	533	20,721	541	11,259	31,980
Swine . . . . .	89	13,778	78	3,983	17,761
Total . . . . .	1,004	218,576	1,365	126,408	344,984

Number of carcasses condemned in the different classes of animals slaughtered in Abattoirs during 1934 and causes of condemnation :—

	CATTLE.										Sheep.		Swine.		TOTALS.
	Oxen.		Bulls.		Cows.		Heifers.		Calves.						
	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	
Tuberculosis . . . . .	63	238	10	27	167	316	18	16	19	13	...	...	44	27	958
Edema and Emaciation . . . . .	5	1	...	...	14	1	...	...	5	...	293	153	2	1	475
Traumatism . . . . .	...	11	...	...	...	1	...	...	1	...	1	30	1	11	56
Septic conditions . . . . .	3	18	...	1	3	5	...	...	2	1	12	41	3	13	102
Pericarditis . . . . .	6	...	...	...	3	...	...	...	...	1	...	...	...	1	11
Peritonitis and Enteritis . . . . .	...	21	...	1	2	9	...	1	...	1	9	17	8	3	72
Pleurisy and Pneumonia . . . . .	7	26	...	1	3	8	...	1	7	9	32	280	12	20	406
Dead, Moribund and Illbled . . . . .	8	...	...	...	8	...	1	...	8	...	177	...	13	...	215
Jaundice . . . . .	2	...	...	...	...	...	...	...	2	...	...	...	1	...	5
Neoplasms . . . . .	...	1	...	1	...	1	...	...	...	...	2	13	...	2	20
Actinomycosis and Actinobacillosis . . . . .	3	12	...	...	...	2	...	...	...	...	...	...	...	...	17
Melanosis . . . . .	1	1	...	...	...	...	...	...	1	1	...	...	...	...	4
Swine Erysipelas . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
Mastitis . . . . .	...	...	...	...	6	...	...	...	...	...	3	7	...	...	16
Metritis . . . . .	...	...	...	...	3	...	...	...	...	...	3	...	2	...	8
John's Disease . . . . .	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
	98	329	10	31	210	343	19	18	45	25	533	541	89	78	2,369

Comparison between tuberculous and non-tuberculous diseases as causes of condemnation in carcasses of animals slaughtered in Abattoirs during 1934.

By Numbers.		CATTLE					Sheep.	Swine	TOTAL.	
		Oxen.	Bulls.	Cows.	Heifers.	Calves.				TOTAL.
Tuberculosis . . .	{ Total Partial	63	10	167	18	19	277	...	44	321
		238	27	316	16	13	610	...	27	637
Total and Partial . . . .		301	37	483	34	32	887	...	71	958
Non-tuberculous diseases {	Total Partial	35	...	43	1	26	105	533	45	683
		91	4	27	2	12	136	541	51	728
Total and Partial . . . .		126	4	70	3	38	241	1,074	96	1,411
By Weight.		Tuberculosis. (lbs.)		Non-tuberculous Disease. (lbs.)			Percentages tuberculous.			
Oxen . . . . .		75,950		28,546			72.7			
Bulls . . . . .		12,586		194			98.5			
Cows . . . . .		141,419		23,540			85.7			
Heifers . . . . .		9,252		351			96.3			
Calves . . . . .		1,554		1,851						
Swine . . . . .		8,431		9,330						
							82.0			
							45.6			
							47.5			



## Number of visits paid to Shops, etc., during 1934 :—

Butchers' Shops . . . . .	1,087
Provision Shops . . . . .	2,278
Fishmongers' Shops . . . . .	418
Fruiterers' Shops . . . . .	890
Meat Sales and Wholesale Meat Shops . . . . .	2,406
Live Stock Sales and Markets . . . . .	260
Street Hawkers . . . . .	31
Hide and Skin Merchants . . . . .	410
Fish Markets . . . . .	311
Restaurants . . . . .	321
	<hr/>
	8,412
	<hr/>

Inspectors are instructed to observe and to report on the sanitary condition of food premises and on the conditions under which foodstuffs are stored. In 25 cases, occupiers of food premises were called upon to carry out cleansing or repairs, and 17 complaints relating to the sanitary condition of lavatories, drains, etc., on food premises were dealt with or passed to the Chief Sanitary Inspector for his attention.

The Sale of Food Order requires butchers and others offering imported meat for sale to attach a label or notice to the meat, bearing the word "Imported" in such a way as to be easily observed by a purchaser. During the year, 19 warnings were issued to butchers for negligence in complying with the terms of the Order.

Numbers and weights of foodstuffs seized in markets, shops, and other premises in the City, during 1934 :—

	No.	Weight in lbs.
Beef . . . . .	66	7,579 $\frac{1}{4}$
Mutton . . . . .	88	4,199
Pork . . . . .	34	1,074
Veal . . . . .	14	383
Poultry and Game . . . . .	31	1,168
Edible Offal . . . . .	17	647 $\frac{1}{2}$
Fruit and Vegetables . . . . .	16	2,276 $\frac{1}{4}$
Provisions . . . . .	15	485
Fish . . . . .	12	11,644 $\frac{1}{2}$
	<hr/>	<hr/>
Total . . . . .	293	29,456 $\frac{1}{2}$
	<hr/>	<hr/>

(3) **Carcases, etc., submitted for Inspection in terms of Article 10 of the Public Health (Meat) Regulations (Scotland), 1932.**—This regulation places an obligation on the consignee of a carcase which he has reason to believe has not been inspected in the manner specified by the Public Health (Meat) Regulations, to report its receipt to the Local Authority of the district. In practice, the wholesale meat traders of the City notify the Veterinary Department in all cases in which they receive home-killed carcases from beyond the City boundaries. During the year, notification was received in respect of 1,641 carcases and 70 parts of carcases. After inspection, 73 carcases, 11 parts of carcases, and 5 heads were seized and destroyed.

(4) **Approval of Meat Storage.**—Article 15 of the Public Health (Meat) Regulations (Scotland), 1932 requires persons selling meat from vans, carts, etc., who do not also keep an open shop for the sale of meat, to obtain from the Local Authority a certificate of approval of the accommodation provided for the storage of meat overnight. Eleven certificates were granted by the Local Authority and, of these, 2 were cancelled in the course of the year. The storage accommodation provided is in each case satisfactory.



## PORT FOOD INSPECTION.

The usual supervision has been maintained as to the condition and soundness of foodstuffs landed at the Port of Leith during 1934. No feature of outstanding interest has arisen.

The appended summary will serve to show the origin and the kinds of foodstuffs falling under the supervision of the Department at the Port of Leith.

Imported Foodstuffs inspected under the Public Health (Imported Food) Regulations (Scotland), 1932, during 1934 :—

Country of Origin.	Foodstuffs.	Number of Consignments.	
Holland . . . . .	Bacon . . . . .	158	
	Canned Meats . . . . .	8	
	Fruit . . . . .	265	
	Lard . . . . .	1	
	Provisions . . . . .	746	
	Vegetables . . . . .	576	
	Yeast . . . . .	103	
		<hr/>	1,857
Denmark . . . . .	Bacon . . . . .	106	
	Canned Meats . . . . .	65	
	Casings . . . . .	7	
	Fish . . . . .	7	
	Fruit . . . . .	3	
	Hams . . . . .	53	
	Lard . . . . .	11	
	Pigs' Feet . . . . .	25	
	Provisions . . . . .	540	
	Vegetables . . . . .	50	
	Sausages . . . . .	21	
	Yeast . . . . .	53	
		<hr/>	941
U.S.A. . . . .	Canned Meats . . . . .	13	
	Cereals . . . . .	13	
	Fruit . . . . .	26	
	Lard . . . . .	6	
	Provisions . . . . .	5	
		<hr/>	63
Canada . . . . .	Canned Meats . . . . .	20	
	Cereals . . . . .	59	
	Hams . . . . .	15	
	Lard . . . . .	21	
	Provisions . . . . .	39	
	Bacon . . . . .	13	
	Fruit . . . . .	24	
	Vegetables . . . . .	2	
		<hr/>	193
Iceland . . . . .	Fish (fresh) . . . . .	11	
	Fish (salted) . . . . .	50	
	Pickled Beef . . . . .	1	
		<hr/>	62
Belgium . . . . .	Fruit . . . . .	58	
	Provisions . . . . .	42	
	Vegetables . . . . .	41	
		<hr/>	141
Germany . . . . .	Fruit . . . . .	11	
	Provisions . . . . .	60	
	Vegetables . . . . .	33	
	Cereals . . . . .	29	
		<hr/>	133
South America . . . . .	Meat . . . . .	14	
	Fruit . . . . .	25	
	Cereals . . . . .	15	
		<hr/>	54
		<hr/>	3,444
Carry forward . . . . .			

Country of Origin.	Foodstuffs.	Number of Consignments.		
		Brought forward . . .		
Roumania . . . . .	Cereals . . . . .	. . . . .	. . . . .	3,444
Greece . . . . .	Fruits . . . . .	. . . . .	. . . . .	2
Australia . . . . .	Cereals . . . . .	. . . . .	. . . . .	3
Egypt . . . . .	Vegetables . . . . .	. . . . .	. . . . .	1
Malay . . . . .	Fruits . . . . .	. . . . .	. . . . .	4
	Cereals . . . . .	. . . . .	. . . . .	7
				12
				—
				19
Italy . . . . .	Fruit . . . . .	. . . . .	. . . . .	1
Spain . . . . .	Fruit . . . . .	. . . . .	. . . . .	4
Japan . . . . .	Fruit . . . . .	. . . . .	. . . . .	2
Russia . . . . .	Cereals . . . . .	. . . . .	. . . . .	4
				<u>3,484</u>

Imported Foodstuffs condemned or rejected and re-exported at the Port of Leith, during 1934 :—

Fruit :—		Weight in lbs.	Weight in lbs.
Black Currants . . . . .		955	
Dried Currants . . . . .		600	
Grapes . . . . .		646	
Tomatoes . . . . .		72	
Mandarins . . . . .		90	
Pineapples . . . . .		7,644	
Melons . . . . .		770	
		<u>          </u>	10,777
Vegetables :—			
Carrot . . . . .		8,855	
Radish . . . . .		1,040	
		<u>          </u>	9,895
Barley . . . . .			1,484
Oats . . . . .			19,152
Rye Flour . . . . .			148,456
Sago . . . . .			8,708
Tapioca . . . . .			1,419
Pickled Beef . . . . .			30
Mutton . . . . .			22
			<u>199,943</u>
			<u>          </u>
Equal to . . . . .		Tons. 89	Cwts. 5
			Lbs. 23

Summary, showing total diseased and unsound foodstuffs dealt with by the Department in the City, during 1934 :—

	Weight in lbs.
At Abattoirs—Carcases . . . . .	344,984
Offal (weight estimated) . . . . .	235,682½
In Shops, Warehouses, etc. . . . .	29,456½
At the Port of Leith . . . . .	199,943
	<u>810,066</u>
	<u>          </u>
Equal to . . . . .	Tons. 361
	Cwts. 12
	Lbs. 82

I am,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,

Chief Veterinary Inspector.

To  
*Chairman and Members of the  
 Public Health Committee.*

## DISEASES OF ANIMALS ACTS.

LADIES AND GENTLEMEN,

The Acts confer power on the Ministry of Agriculture to make Orders for the control and prevention of animal diseases, to govern the import and export of animals and carcases, to control the conditions of transport of animals, by land and sea, and for other similar purposes. The following diseases are subject to administrative control by means of Orders made by the Minister :—

Anthrax.  
 Foot and Mouth Disease.  
 Parasitic Mange of Horses.  
 Sheep Scab.  
 Swine Fever.  
 Bovine Tuberculosis and Contagious Abortion (for certain purposes only).  
 Cattle Plague or Rinderpest. (1877.)  
 Contagious Bovine Pleuro-Pneumonia. (1898.)  
 Glanders and Farcy. (1928.)  
 Epizootic Lymphangitis. (1906.)  
 Rabies. (1922.)  
 Sheep Pox. (1850.)

There have been no cases of the last six diseases in Great Britain since the dates shown against each.

In addition to numerous Orders controlling the movement of animals in foot-and-mouth disease infected areas, the Ministry of Agriculture issued the following new general Orders during the year :—

- (1) Sheep Scab (Amendment) Order of 1934.
- (2) Sheep Scab (Amendment) Order of 1934 (No. 2).
- (3) Pennine Range (Movement of Sheep) Order of 1934.
- (4) Pennine Range (Movement of Sheep) Orders of 1934 (Nos. 2 and 3).
- (5) North Uist (Movement of Sheep) Order of 1934.

**Anthrax.**—One case of anthrax occurred in the City during the year.

Nineteen deaths of bovine animals on farms (including the case of anthrax referred to) were reported and investigated in terms of the Edinburgh and Midlothian Order of 1910, the main object of which is to eliminate the risk of a case of anthrax escaping detection. The anthrax infected carcase was cremated and the remaining 18, which were negative so far as notifiable disease was concerned, were disposed of by the owners. The cause of death was similarly investigated in respect of 183 cattle, sheep and pigs found dead on arrival of trains and boats, or which died, without previously observed illness, in the lairages attached to the Markets and Slaughterhouses.

**Foot and Mouth Disease.**—Seventy-nine outbreaks of foot-and-mouth disease occurred in Great Britain during 1934, entailing the slaughter of 10,245 animals, as compared with 87 outbreaks and 7,806 animals slaughtered in 1933. The movement of animals within the City was not restricted or regulated by any of the Orders issued by the Ministry of Agriculture in relation to these outbreaks. The last outbreak of foot-and-mouth disease in the City occurred in 1922.

The following Orders, which are more or less complementary to the principal foot-and-mouth disease Orders, have continued in operation, and the observations and visits necessary for their enforcement have been made :—Foreign Hay and Straw Order ; Foot-and-Mouth Disease (Packing Materials) Order ; Foot-and-Mouth Disease (Boiling of Animal Foodstuffs) Order ; Importation of Carcases (Prohibition) Order ; Importation of Meat, etc. (Wrapping Materials) Order ; and Movement of Animals (Records) Order.

In connection with the Movement of Animals (Records) Order, a check of the record books of stockowners in the City was again made with the assistance of the Police.

**Parasitic Mange.**—One suspected case of parasitic mange was reported during the year and proved negative on investigation.

**Sheep Scab.**—The City has again a clean record in respect of this disease. The Regulations made by the Local Authority, under the Sheep Scab Order, which require the dipping of all sheep in the City during the period 15th July to 31st August, and again during the period 1st September to 30th November, have remained in force. In terms of the Regulations, 18,010 sheep were dipped under supervision during the year.

There were only 10 outbreaks of Sheep Scab on the mainland in Scotland during 1934, and, of these, seven occurred in the County of Stirling, and appear to have been associated with cases introduced from the North of England during the preceding year. In the outer islands 50 outbreaks occurred. The movement of sheep from the outer islands to the mainland continues to be controlled by Orders of the Ministry of Agriculture, and no doubt this control will continue until the disease position in the islands has undergone material improvement.

The Sheep (Movement into Scotland and Northumberland) Order of 1933 requires the double-dipping of all sheep, unless intended for immediate slaughter, moved into Scotland from England (with the exception of Northumberland) as a measure of protection against the introduction of sheep scab into Scotland from south of the border. Three hundred and forty-two sheep were received in the City under licence in terms of this Order of which 187 were moved under further licence to slaughterhouses and 155 to farms.

**Swine Fever.**—Three reports of suspected swine fever were investigated and proved negative.

**Regulation of Movement of Swine Order.**—Twenty pigs were moved in terms of this Order under licence from scheduled areas in England to various premises in the City, subject to detention and isolation for twenty-seven days after arrival. Periodical visits were made to these premises with the double object of seeing that the conditions of the licence were fulfilled and to maintain observation on the health of the pigs.

**Bovine Tuberculosis.**—Nineteen animals were dealt with under the Tuberculosis Order of 1925. Seven animals which were detected in the Live Stock Markets were slaughtered by the owners at their own risk. The 19 animals were grouped as follows :



—(1) Tuberculosis of the Udder, 6 ; (2) Tuberculous emaciation, 4 ; and (3) Chronic cough and showing definite clinical evidence of tuberculosis, 9. Tuberculosis of the udder constituted 41·6 per cent. of the cases dealt with in the City. The 12 animals slaughtered by the Local Authority were classified for compensation into—Advanced 9 (75 per cent.) and Not advanced 3 (25 per cent.).

The aggregate value of the twelve animals was £97, and the compensation paid amounted to £37 10s., an average of £3 2s. 6d. per animal. Seventy-five per cent. of the gross compensation is refunded by the Treasury and the proportion payable by the Local Authority was thus £9 7s. 6d. The gross salvage realised was £23 19s. 0d. After deducting outlays, there remained a balance of £3 8s. 1d. in favour of the Local Authority.

**Control of Dogs Order.**—This Order and the Regulations made in terms thereof require (1) the wearing by dogs of a collar bearing the name and address of the owner, and (2) the maintenance of dogs under effective control between sunset and sunrise. The object of the Order is the prevention of sheep-worrying. Proceedings were taken against 34 persons for breach of the Order or the Regulations. Of these, 1 case was dropped, 6 persons were admonished, and 26 were fined sums varying from 2s. 6d. upwards. One case was outstanding at the end of the year.

**Importation of Animals.**—(1) Irish and Canadian Cattle. The Orders which control the importation of Irish and Canadian cattle, provide that the imported cattle must be landed at ports approved for the purpose, where, on arrival, they are inspected and thereafter they may be moved on licence, in the case of fat cattle, to a slaughter-house, either direct or through an authorised market, and, in the case of store cattle, to (a) a specially authorised market, or (b) farms or other premises where they must be detained for six days after arrival. 20,212 Irish cattle and 81 Canadian cattle were received at Gorgie Market under licence from ports, and 1,249 licences were issued authorising movement of these cattle from the Market. 5,160 Irish and 109 Canadian cattle were moved to farms in the district of the Local Authority from the Market or direct from the ports, and were maintained under observation during the period of detention. 649 Irish and 336 Canadian cattle were licensed from the Markets or ports to Gorgie Abattoir.

(2) Dogs and Cats.—The Importation of Dogs and Cats Order is intended to protect Great Britain against the introduction of rabies through the agency of canine or feline animals brought from overseas. The landing of such animals in Great Britain is prohibited except under licence granted by the Ministry of Agriculture. After landing, the animals must be detained for six months in a place of detention or quarantine approved by the Minister for the purpose. Performing animals may be moved from place to place under strictly controlled conditions which are endorsed on the licence and subject to the previous approval of the Ministry in respect of each movement. Nine performing animals were received in the City under the Ministry's licence.

During the year 37 canine and feline animals (including 5 puppies born in quarantine) were received and detained in the City in quarantine. They were maintained under observation and police supervision.

An attempted illegal landing of a dog at the port of Leith was detected. The dog was lodged in quarantine and was subsequently re-exported under licence of the Ministry of Agriculture.

(3) Horses.—Four consignments, comprising 137 horses, were landed at Leith Docks from Iceland and Holland. The horses were released after inspection and on submission of the necessary certificates.

**The Animals (Importation) Order of 1930.**—This Order makes it unlawful to bring into any port in Great Britain ruminating animals or swine which have been on board a vessel whilst in a port in a prohibited country, whether taken on board the vessel in a prohibited country or not. There was no breach of this Order at the Port of Leith during the year.

**Certification for Export.**—The Dominions of Canada and New Zealand require disinfection and certification of straw and hay used for packing goods exported from this Country to the Dominions. Facilities are provided for the disinfection of straw and hay used for packing, at an old Municipal Disinfecting Station, at a small charge to cover costs. During the year, 145 certificates were issued to cover goods exported in disinfected straw. Surprise visits were paid, from time to time, to the packing establishments of exporters to ensure that the conditions necessary for certification were being complied with.

In addition to the above, certificates were granted, after the necessary inspection, to cover exports of pigs to Northern Ireland, the Irish Free State and South Georgia, of wool to Italy, Bulgaria, Poland, Austria and Germany, and of bags (disinfected) to Canada.

**Sea Transport of Animals.**—The Animals (Sea Transport) Order prescribes the accommodation and fittings which must be provided on board ship for transport of animals by sea. It deals also with the protection of animals against unnecessary suffering during sea transport to or from Great Britain. Inspectors of the Ministry maintain supervision of the oversea transport and especially of the export of horses to the Continent, but supervision of the coastwise traffic devolves, in a large measure, on the officers of the Local Authority. Animals were landed at Leith Docks from coastwise vessels, during the year as follows:—Horses 324, Cattle 72, Sheep 32,377, Pigs 626. The cleansing and disinfection of the vessels after landing of the animals was carried out under the supervision of the Officers of the Local Authority.

**The Transit of Animals Orders** are similarly designed to protect animals during transport by road or rail and, in addition, prescribe cleansing and disinfection of cattle trucks, motor and horse-drawn vehicles used in the transport of animals. The Markets Committee have continued to provide facilities and labour at Gorgie Markets for the cleansing and disinfection of road vehicles. 5,506 vehicles were cleansed and disinfected at Gorgie Markets during the year, an average of 105 vehicles per week. The Railway Companies have satisfactorily discharged their obligations in the cleansing and disinfection of cattle trucks, railway sidings and approaches. One road contractor

was prosecuted and fined £5, for leaving the Market after the discharge of animals without cleansing and disinfecting his vehicle. Two cases of breach of this Order were outstanding at the end of the year.

**The Markets, Sales and Lairs Order.**—This Order regulates many features in the construction of live stock markets, and provides for cleansing and disinfection on each occasion after use. All the Marts at Gorgie are well constructed for efficient and relatively easy disinfection. Regular supervision has been maintained and the work has generally been well done.

**Summary of Contraventions of the Diseases of Animals Acts and Orders** dealt with during the year :—

Orders.	Number of Cases.	Results.
Transit of Animals Order . . . . .	1 1 2	Fined £5. Dropped Outstanding
Foot and Mouth Disease (Packing Materials) Order .	2	Fined 2s. 6d.
Control of Dogs Order . . . . .	1 2 15 6 6 1 1	Fined £3. Fined 7s. 6d. Fined 5s. Fined 2s. 6d. Admonished Dropped. Outstanding

**Protection of Animals (Scotland) Act, 1912.**—During the year, 27 animals were found in the Markets suffering from disease or injury which exposed them to unnecessary suffering if put through the ordinary procedure of exposure for sale and disposal. As the result of the action taken, all of these animals were passed to the local Abattoir and there slaughtered.

**Lighting and Cleansing Department Stud.**—Five hundred and seven visits of attendance were made to the stud under the control of the Lighting and Cleansing Department, and 15 horses were subjected to inspection and examination prior to consideration of purchase for the Lighting and Cleansing Department.

**Staff and Police.**—I desire to express my thanks to the Staff of the Department for their assistance and for the efficient manner in which they have carried out their duties during the year. I also wish to express my gratitude to the Chief Constable for his willing co-operation, and to the Officers of the Police Force, whose assistance has contributed materially to the efficient performance of the duties under the Diseases of Animals Acts.

I am,

Ladies and Gentlemen,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,

*Chief Veterinary Inspector.*

